

EXHIBIT F

Exhibit

5

IN THE DISTRICT COURT OF THE UNITED STATES
FOR THE NORTHERN DISTRICT OF OHIO

EASTERN DIVISION

-----X

IN RE: :

MDL DOCKET NO. 1535 : Case No. 1:03 CV 17000

WELDING ROD PRODUCTS : Judge Kathleen O'Malley

LIABILITY LITIGATION :

-----X

Videotaped deposition of JON PETER FRYZEK, Ph.D.

Baltimore, Maryland

Tuesday, February 8, 2005

9:15 a.m.

Job No.: 22-50687

Pages: 1 - 321

Reported by: Beatriz D. Fefel, RPR



1 Videotaped deposition of JON PETER FRYZEK
2 held at the law offices of:

3
4 McCARTER & ENGLISH, L.L.P.
5 300 East Lombard Street
6 Suite 1000
7 Baltimore, Maryland 21202
8 (410) 659-8500
9

10
11 Pursuant to agreement, before Beatriz D.
12 Fefel, Registered Professional Reporter and Notary
13 Public of the State of Maryland.
14
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18
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20
21
22
23
24
25



A P P E A R A N C E S

ON BEHALF OF THE PLAINTIFFS:

JIM CROSBY, ESQUIRE

CROSBY SAND

6404 Hillcrest Park Court

Mobile, Alabama 36695

(251) 476-3000

ON BEHALF OF THE DEFENDANT GENERAL ELECTRIC
COMPANY:

NATHAN A. SCHACHTMAN, ESQUIRE

ERIKA J. DOHERTY, ESQUIRE

McCARTER & ENGLISH, L.L.P.

1735 Market Street

Mellon Bank Center, Suite 700

Philadelphia, Pennsylvania 19103-7501

(215) 979-3800

AND

LUTHER L. HAJEK, ESQUIRE

SPRIGGS & HOLLINGSWORTH

1350 I Street, Northwest

Washington, D.C. 20005

(202) 898-5800

A P P E A R A N C E S (C O N T I N U E D)

ON BEHALF OF THE DEFENDANT MABSCOTT SUPPLY:

MATTHEW A. KELLY, ESQUIRE

CAMPBELL, WOODS, BAGLEY, EMERSON, McNEER &

HERNDON, P.L.L.C.

517 Ninth Street

Suite 1000

Huntington, West Virginia 25719-1835

(304) 529-2391

ON BEHALF OF THE DEFENDANT SELECT ARC:

RICHARD M. EDMONSON, ESQUIRE

ARMSTRONG ALLEN

4450 Old Canton Road

Highland Bluff North, Suite 210

Jackson, Mississippi 39211

(601) 713-1192

A P P E A R A N C E S (C O N T I N U E D)

ON BEHALF OF THE DEFENDANTS ILLINOIS TOOL WORKS,
INC., AND MILLER ELECTRIC MANUFACTURING COMPANY:

HUBERT O. THOMPSON, ESQUIRE

BROTHERS & THOMPSON, P.C.

100 West Monroe Street

Suite 1700

Chicago, Illinois 60603

(312) 372-2090

ON BEHALF OF THE DEFENDANT METROPOLITAN LIFE
INSURANCE:

JOSE RAMON GONZALEZ-MAGAZ, ESQUIRE

STEPTOE & JOHNSON, L.L.P.

1330 Connecticut Avenue, Northwest

Washington, D.C. 20036-1795

(202) 429-8110

ALSO PRESENT: Adam Lemnah, Videographer



C O N T E N T S

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P R O C E E D I N G S

1
2 THE VIDEOGRAPHER: Here begins Tape No. 1 in
3 the deposition of John P. Fryzek, Ph.D., In Re: MDL
4 Docket No. 1535, Welding Rod Products Liability
5 Litigation, in the United States District Court for
6 the Northern District of Ohio, Eastern Division, Case
7 No. 1:03 CV, 17000. Today's date is February 8th,
8 2005, the time is 9:15 a.m. The video operator today
9 is Adam Lemnah of LegaLink Biloxi. This video
10 deposition is taking place at the office of McCarter &
11 English, 300 East Lombard Street, Suite 1000,
12 Baltimore, Maryland, 21202, and was noticed by Jim
13 Crosby, counsel for the Plaintiffs.

14 Will the counsel please identify themselves
15 and state whom they represent?

16 MR. CROSBY: I'm Jim Crosby. I represent
17 the Plaintiffs.

18 MR. THOMPSON: Hubert Thompson. I represent
19 Illinois Tool Works and Miller Electric.

20 GONZALEZ-MAGAZ: Jose Ramon Gonzalez-Magaz
21 of the law firm of Steptoe & Johnson on behalf of
22 Metropolitan Life Insurance Company.

23 MR. KELLY: Matthew Kelly on behalf of
24 Mabscott Supply Company.

25 MR. HAJEK: Luke Hajek of Spriggs &

1 Hollingsworth on behalf of General Electric.

2 MR. EDMONSON: Richard Edmonson on behalf of
3 Select Arc.

4 MS. DOHERTY: Erika Doherty on behalf of
5 British Oxygen and other companies.

6 MR. SCHACHTMAN: Nathan Schachtman, McCarter
7 & English, also on behalf of British Oxygen, Lincoln
8 Electric, and other companies.

9 THE VIDEOGRAPHER: The court reporter today
10 is Bea Fefel of LegaLink Biloxi. Will the reporter
11 please swear the witness?

12 -----
13 JON PETER FRYZEK, Ph.D.

14 having been duly sworn, testified as follows:

15 THE VIDEOGRAPHER: Please begin.

16 EXAMINATION BY COUNSEL FOR THE PLAINTIFFS

17 BY MR. CROSBY:

18 Q Would you state your name, please, for the
19 record?

20 A My name is John Peter Fryzek.

21 Q And where do you live?

22 A I live in Gaithersburg, Maryland.

23 Q And what do you do?

24 A I'm a research scientist.

25 Q Are you employed?

1 A Pardon me?

2 Q Are you employed?

3 A Yes.

4 Q Where are you employed?

5 A I'm employed through the International
6 Epidemiology Institute in Rockville, Maryland, and
7 Vanderbilt University in Nashville, Tennessee.

8 MR. SCHACHTMAN: Can we just stop for a
9 moment, Mr. Crosby? And I'm just going to address the
10 people on the phone.

11 If people come on and drop off, we're going
12 to drop you off. It's very distracting to the witness
13 and the examiner and everyone else in the room, and so
14 if you're here and you want to listen, you're welcome
15 to listen, otherwise we're just going to disconnect.

16 BY MR. CROSBY:

17 Q Have you ever given a deposition before?

18 A Never.

19 Q Have you ever testified in court before?

20 A No.

21 Q Okay. Has anybody explained to you how
22 depositions proceed generally?

23 A Yes.

24 Q Okay. Let me give you sort of my version,
25 and if I say anything that disagrees with what you

1 understand, let me know because I want to be sure we
2 start off on the same page. Okay?

3 A Okay.

4 Q I represent Plaintiffs and I am here to take
5 your deposition by asking you questions. And I then
6 want you to answer the questions to the best of your
7 ability under oath. Do you remember being sworn?

8 A I remember.

9 Q All right. If I ask you a question and you
10 don't understand the question or any part of it,
11 please let me know. All right?

12 A Umh-humh.

13 Q Another thing that's important is that
14 although we have this videographer here who will do an
15 excellent job, is for you to please answer audibly
16 yes, if your answer is in the affirmative, and audibly
17 no, if your answer is in the negative, because
18 umh-humh and hunh-unh can sometimes get misunderstood
19 by this lady who is also an excellent person that
20 writes what we say down. But to avoid any problem
21 with that, I'd ask that you answer audibly and not
22 shake or nod your head, but to give a clear yes or no
23 when the answer suits that. All right, sir?

24 A Yes.

25 Q Now, if I ask you a question and you do not

1 understand that question or any part of it, please let
2 me know for an important reason. If you answer the
3 question it's going to be taken that you understood it
4 and you answered it to the best of your ability under
5 oath. All right, sir?

6 A Yes.

7 Q Did I say anything there that disagrees with
8 anything that you understood as to how things would
9 proceed?

10 A You did not say anything that disagrees with
11 what I understand.

12 Q All right. Another point that I want to
13 emphasize with you that is this is sort of an open-
14 book test. In other words, I want to know what you
15 know, and I'm not trying to get you to tell me
16 something you don't know, but if there is a document
17 or some information from some source that you need in
18 order to answer to the best of your ability under
19 oath, please let me know. All right, sir?

20 A Yes.

21 Q Have you given video conferences before?

22 A No, I've never given a video.

23 Q Okay. Have you ever done any sort of
24 rehearsed for video conferences or presentations for
25 video or television programs or anything like that?



1 A No, I haven't.

2 Q All right. So this will be your first
3 occasion in front of a camera other than a, maybe home
4 videos or something like that?

5 A Yes.

6 Q I know that they sometimes make me feel
7 uncomfortable. If it's giving you a problem with
8 focusing and giving answers, please let me know.

9 A Okay.

10 Q Because it's important that we get your best
11 answer under oath.

12 A (Nodding.)

13 Q You also have a right, if you wish, when
14 this is over with, this lady will type up what
15 everybody in here says whenever we're on the record
16 and put it in a neat little booklet, and you can read
17 what she has typed up and check that to see that she
18 has typed up what you best recall having said, and if
19 you see something there that looks like either she
20 misunderstood or you misspoke, you can make a note in
21 the back on an errata sheet to make any adjustment.

22 Is that something you want to do? Or you
23 have a right to waive it.

24 A That's something I want to do.

25 Q All right, sir.



1 Are you on any kind of medication?

2 A Yes.

3 Q Okay. Is it any kind of medication that
4 will in any way impact your ability to understand the
5 questions that I'm asking?

6 A No, it won't.

7 Q Will it in any way impact your ability to
8 recall whatever you may need to recall in order to
9 respond?

10 A No, it won't.

11 Q Will it impact your ability to speak?

12 A No.

13 Q So insofar as -- and tell me if I'm wrong.
14 That's another thing. Anytime I'm asking you
15 questions and I've got something wrong, just say, you
16 know, Jim, you've misunderstood or you got it wrong.
17 But as I understand it, you're clear-headed and feel
18 fully competent to understand and answer questions
19 under oath.

20 A Yes.

21 Q Okay. You've been identified as an expert
22 witness that may be called in some cases involving
23 welding rod litigation. Have you ever been retained
24 as an expert with the potential of being a witness in
25 any litigation?

1 A No.

2 Q Did you have any involvement as a consultant
3 in any litigation where you would not be called as an
4 expert?

5 A Yes.

6 Q And without at this point revealing
7 particulars as to whom, what litigation have you been
8 involved in?

9 A You mean in terms of areas of litigation,
10 or --

11 Q Yes, sir.

12 A One case was around the Superfund site, and
13 then on another case about dioxin.

14 Q Is that while you were employed at IEI?

15 A One was at IEI, the dioxin case was.

16 Q And where were you on the Superfund event?

17 A University of Michigan.

18 Q Which side had retained you in the Superfund
19 event?

20 A I think it was the defense.

21 Q And what about in the dioxin?

22 A Defense.

23 Q Did you have any role with respect to breast
24 implant litigation?

25 A No, none at all.



1 Q Did IEI?

2 A II does, yes.

3 Q You call it IE, or EI, or what? So we'll be
4 on the same page.

5 A IEI.

6 Q Okay. And is IEI a Maryland corporation?

7 A Yes.

8 Q Is it a for-profit corporation?

9 A Yes, it is.

10 Q Are you a shareholder?

11 A No.

12 Q Who are the shareholders, do you know?

13 A I don't know.

14 Q Who are the principals?

15 A Doctor William Blot, B-L-O-T, and Joseph
16 McLaughlin.

17 Q When were you first retained in this
18 litigation?

19 A I began working on the study of welders last
20 January, but in terms of being retained to testify it
21 was, I think, December, November/December of last
22 year.

23 Q So back in -- let me make sure I understand.

24 A Umh-humh.

25 Q January of '04, about a year ago?

1 A Yeah.

2 Q You began some research with respect to
3 welding?

4 A Right.

5 Q And later of last year, November or
6 December, you were retained as an expert?

7 A Right.

8 Q When did you first have any discussions with
9 any lawyers that represent Defendants in the welding
10 litigation?

11 A I think the first time was last, it was
12 either July or August, after we completed the study.

13 Q And when did you first have any discussions,
14 if ever, with anybody connected with the welding rod
15 industry?

16 A Other than lawyers?

17 Q Yes.

18 A I've never discussed anything with anyone
19 other than lawyers.

20 Q Okay. What about any of the other personnel
21 at IEI, when were they first approached by the welding
22 rod manufacturers or their lawyers about consulting?

23 A I'm not exactly sure of the date. I know on
24 the proposal that we wrote there was a date on that.
25 But prior to that time I don't know.



1 Q So the proposal for the, shall we call it
2 the Danish study?

3 A Yes.

4 Q As far as you know, was that the first
5 contact between anyone with IEI and anyone with the
6 welding manufacturing industry?

7 A To my knowledge, yes.

8 Q Okay. So you're not saying that there
9 wasn't contact before that, that's just the only part
10 you know about?

11 A I'm saying, yeah, I don't know about other
12 contacts.

13 Q So, for example, Mr. Blot -- or is he a
14 doctor?

15 A Doctor Blot, yes.

16 Q Is he a medical doctor, or a Ph.D.?

17 A Ph.D.

18 Q And Doctor McLaughlin, is he a medical
19 doctor, or a Ph.D.?

20 A Ph.D.

21 Q Do you know if either of them at any time
22 had any discussions with any welding rod manufacturers
23 or lawyers prior to the date of the proposal in 2004?

24 A No. The first time I heard about it was
25 with the proposal.



1 Q Right. I understand that's when you first
2 heard about it, but you don't know if Doctor Blot or
3 Doctor McLaughlin had other discussions?

4 A I have no idea.

5 Q And you don't know whether or not -- is
6 Doctor Garabrant with IEI?

7 A He's affiliated, but he's, he's not housed
8 there. I don't think -- we don't even fund him. He's
9 not housed at IEI. We don't fund him.

10 Q By you don't fund him, what does that mean?

11 A He doesn't take any salary from us.

12 Q Okay. But is he on your website?

13 A Yeah. I think, yeah, I think he is.

14 Q So of the people that are on your website --

15 A Umh-humh.

16 Q -- which ones are funded by IEI?

17 A There's Doctor Blot; Doctor McLaughlin;
18 Doctor Boice, John Boice; Doctor Robert Tarone;
19 myself; Lisa Signorello, Doctor Lisa Signorello;
20 Ms. Binini Chadda; Mark Steinwandevl; Sarah Cohen; Mike
21 Mumma.

22 Q How do you spell his last name?

23 A M-U-M-M-A. That's it, that's it.

24 Q Are any of those folks medical doctors?

25 A No.



1 Q And which ones have post undergraduate
2 degrees, either master's or Ph.D.?

3 A All of them except for Mark Steinwandevl.

4 Q And what's his level?

5 A Bachelor's.

6 Q Is it a BS?

7 A Yes.

8 Q And Doctor Blot, is his a Ph.D., or an

9 S.C.D.?

10 A Ph.D.

11 Q Doctor McLaughlin?

12 A Ph.D.

13 Q Boice?

14 A Boice, S.C.D. Tarone is Ph.D. I'm a Ph.D.

15 And Signorello is an S.C.D.

16 Q How many people are there -- if you know, in
17 your reasonable judgment, if you have one. Please
18 don't guess.

19 A Okay.

20 Q How many people are there affiliated with
21 IEI who are, as you put it, unfunded?

22 A To my knowledge, I can think of three at
23 this time.

24 Q Okay. And who are they?

25 A Doctor Garabrant, Mr. Marano, and Doctor



1 Robert Weiss.

2 Q Who is Doctor Weiss?

3 A I believe he is a psychiatrist. I may have
4 his name incorrect.

5 Q Okay. The unfunded individuals, what is
6 their role with IEI?

7 A We collaborate with them on some projects.

8 Q What does that mean?

9 A Sometimes if we have a proposal to do
10 something and they can bring some expertise to the
11 project, we include them on the proposal.

12 Q What does Doctor -- I mean, excuse me, Don
13 Marano do?

14 A He's an industrial hygienist.

15 Q Did he work on the Danish study?

16 A No.

17 Q Did he propose any work on the Swedish
18 study?

19 A No.

20 Q Doctor Robert McLaugh -- is he a doctor, I
21 think you said?

22 A I think so, yeah.

23 Q What is his area?

24 A I'm not sure.

25 Q And Doctor Garabrant?

1 A Yeah.

2 Q What's his area?

3 A Occupational medicine.

4 Q Is he an M.D. and a Ph.D., or an M.D.?

5 A M.D.

6 Q So is he a certified epidemiologist, or is
7 he an occupational medical doctor who at times engages
8 in some areas of epidemiology?

9 MR. SCHACHTMAN: Objection to the form.

10 A It's my understanding he does both. He's an
11 occupational medicine physician and that he sees
12 patients and he also conducts epidemiological studies.

13 Q Okay. Is he in any epidemiological
14 societies of which you are aware?

15 A I'm not aware of what societies he's in.

16 Q How long have you known him?

17 A Since 1992, '93.

18 Q And what were the circumstances under which
19 you all met?

20 A I was his student for my Ph.D.

21 Q At the University of Michigan?

22 A Yes.

23 Q Did anyone else at IEI while you were a
24 student there have any affiliation with the University
25 of Michigan?



1 A No.

2 Q I'm going by memory so I can really be wrong
3 now.

4 A Okay.

5 Q Where did you get your Ph.D.?

6 A Michigan.

7 Q And did you write a dissertation? Did they
8 call it a dissertation there?

9 A Yes.

10 Q And who was your faculty mentor or guide for
11 that, if anybody?

12 A Yeah. I had a committee, and the professors
13 on the committee, Doctor David Garabrant and Doctor
14 Sioban Harlow, were the chairs. Doctor David
15 Schottenfeld and Doctor Richard Severson and Doctor
16 Brenda Gillespie.

17 Q Prior to the date of the proposal for the
18 study done for the welding industry, the Danish study,
19 had you and Doctor Garabrant discussed welding
20 matters?

21 A No.

22 Q With whom, if anybody, had you had any
23 discussions about health effects of welding prior to
24 the welding proposal --

25 A No one.



1 Q -- or the Danish study?

2 A No one.

3 Q Assuming that the proposal was in mid-2004,
4 and we'll get to it in a minute, but assume that it
5 was -- well --

6 A It was probably 2003.

7 Q 2003?

8 A Umh-humh.

9 Q August 2003.

10 A Okay.

11 Q Is that what triggered you looking into
12 welding, was the proposal had been made and accepted?

13 A Yeah, I was instructed to monitor the
14 project.

15 Q Okay. Who instructed you to do that?

16 A Doctor Bill Blot, my supervisor.

17 Q By monitoring the project, what do you mean?

18 A Going to Denmark and interacting with our
19 collaborators and establishing study design and
20 analysis, and things like that.

21 Q So was it your job to make sure it was
22 right, done right as well as it could be?

23 A Along with the other collaborators on the
24 project.

25 Q Who had overall responsibility for assuring



1 that the Danish study for the welding industry was
2 done correctly top to bottom?

3 A Doctor Jorgen Olsen.

4 Q And who is that?

5 A He's the head of the Danish Department of
6 Epidemiology at the Danish Cancer Institute in
7 Copenhagen, Denmark.

8 Q And does he have any affiliation or
9 associations with any industry?

10 A No.

11 Q How long has he had that position?

12 A I have no idea.

13 Q Were you subject to his oversight?

14 A Absolutely, yes.

15 Q So was everybody subject to his oversight?

16 A Yes.

17 Q And where does he reside or work?

18 A Copenhagen, Denmark.

19 Q And is he the person that would have all of
20 the data that relates to the study?

21 A Yes. All of the data is in Copenhagen.

22 Q Has any of the data ever been transferred or
23 transmitted by any means to the U. S.?

24 A No.

25 Q Did you have access to any of the data?



1 A While I was in Copenhagen I had access to
2 the data.

3 Q All of it?

4 A All of it. Actually, not all of it. Some
5 of it was summary data.

6 Q Okay. Who had the underlying data?

7 A Our Danish collaborators.

8 Q Did you ever have any access to the
9 underlying data?

10 A That's a difficult question to answer. By
11 underlying data, I'm going to say the hospitalization
12 records, and I did not have access to those.

13 Q Okay. Did you have any access to the
14 databases and information housed in databases
15 maintained by the various registries?

16 A I, I saw the databases, but I did not
17 manipulate them.

18 Q So you were unable or not allowed to
19 manipulate the databases?

20 A No, I -- it -- we had the analyst in Denmark
21 who was familiar with the databases who did the
22 manipulation.

23 Q And who was that?

24 A Her name is Andrea Bouts.

25 Q And whose oversight was she subject to?



1 A Doctor Jorgen Olsen.

2 Q Did you have any authority or right to see
3 what she was doing and how she manipulated the data
4 and to verify the accuracy of it?

5 A I -- I'm sorry. I don't understand the
6 question.

7 Q Okay. As I understand it, you got summary
8 reports?

9 A Correct.

10 Q And as I understand it -- I've forgotten her
11 last name. Andrea, was it?

12 A Bouts.

13 Q Bouts?

14 A Yeah.

15 Q Manipulated the data, and maybe I'm wrong,
16 and from that I assume she generated the summary
17 reports?

18 A It was, it was actually a more complex
19 process than that.

20 Q Okay.

21 A The original databases are housed in the
22 Danish National Board of Health and Welfare, which is
23 a governmental organization.

24 Q How many databases are there?

25 A They have -- I'm not sure. All of the --



1 Denmark is a nationalized medical care system and any
2 type -- anytime you have contact with the medical
3 system, that information is put in a database.

4 Q Okay. So are we talking tens of databases,
5 or hundreds of databases, or thousands of databases?

6 A Probably hundreds. But I'm not, I'm not
7 certain, certain of the number.

8 Q Okay. So Danish citizens whenever they have
9 any kind of medical treatment --

10 A Umh-humh.

11 Q -- is it entered into one of these databases
12 or registries?

13 A Right, yes.

14 Q Would that include hospitalizations?

15 A Yes.

16 Q And emergency room visits?

17 A Yes.

18 Q And clinics?

19 A Yes.

20 Q Are there any private clinics for private
21 physicians where a regular Danish person can just go
22 see their doctor?

23 A It's my understanding there is for plastic
24 surgeons.

25 Q Okay. And is that in a registry?



1 A That is not -- it's not in the governmental
2 registry.

3 Q So other than --

4 A I'm sorry. If they go to the public clinics
5 for plastic surgery, then it is in the registry.

6 Q Are there any other private clinics in the
7 Danish medical system that you're aware of other than
8 those relating to plastic surgery?

9 A Not that I'm aware of.

10 Q Have you done anything to ascertain whether
11 there are?

12 A I, I -- my collaborators there tell me there
13 is not, so I trusted their knowledge.

14 Q Are any of them medical doctors?

15 A Yes.

16 Q Were any of them neurologists?

17 A I'm not sure what their field of expertise
18 is.

19 Q So with respect to the Danish study for the
20 welding industry, as I understand it, we don't know if
21 there was anybody who was a trained neurologist
22 involved in it?

23 A That's correct.

24 Q Have you had any training in neurology?

25 A No.



1 Q Okay. How about movement disorders?

2 A No.

3 Q Do you have a personal diagnostic criteria
4 that you use with respect to determining whether or
5 not a person has Parkinson's disease?

6 A No.

7 Q How about Parkinsonism?

8 A No.

9 Q How about manganese?

10 A No.

11 Q Had you ever had an occasion to witness
12 people being examined for a diagnosis of movement
13 disorders?

14 A No.

15 Q Did you have any occasion to see or discuss
16 with any of the people that were the subject of this
17 Danish study that were diagnosed with any sort of
18 movement disorder?

19 A No.

20 Q Did you see any of the people that were
21 involved in that study?

22 A No. It was a retrospective study.

23 Q And as I understand it, you didn't have
24 access to their identity to find out who they were
25 anyway, correct?



1 A Correct.

2 Q So, then, if someone wanted to do -- or if
3 you had wanted to do an independent verification on a
4 random sample basis as to whether or not a living
5 member of the group really did have Parkinsonism or a
6 movement disorder, you would not have been able to do
7 that; am I correct?

8 A There was a verification of Parkinson's
9 disease in the study. The Danes did go through a
10 process where they verified the diagnosis of
11 Parkinson's disease.

12 Q Did they do that by seeing people, or did
13 they do that by looking at records?

14 A They looked at records.

15 Q Did anybody look at people?

16 A To my knowledge, no.

17 Q And if you had wanted to look at people, you
18 were not allowed access to the information to
19 undertake that verification; is that correct?

20 A Yes, that's correct.

21 Q Was there anything to preclude the Danes
22 from doing an independent verification by looking at
23 the records, ascertaining the person's identity, and
24 then following up that person?

25 A I don't know.



1 Q Is there a separate registry for
2 psychological disorders?

3 A For psych -- I, I'm not sure. There might
4 be.

5 Q Was there -- would it be -- excuse me. If
6 there is such a registry for psych -- let's call it
7 psychiatric disorders, too, was there one for that?

8 A If there is, I have not used it.

9 Q If there is, would it maintain records of
10 neuropsychological disorders or diagnoses, or do you
11 know?

12 A I have no idea.

13 Q Are you familiar with whether or not there
14 are studies that indicate that Parkinsonism or
15 Parkinson's disease manifest neuropsychological
16 symptoms and signs?

17 A I'm not aware of those studies.

18 Q When was your first meeting with the lawyers
19 that represent the welding industry?

20 A I think it was last July, July 2004.

21 Q And who was there?

22 A Oh, to be honest, I can't recall all their
23 names.

24 Q All right.

25 A There was a lot of them.



1 Q Which ones can you recall?

2 A Mr. Schachtman was there, Ralph Davies.

3 That's all I recall.

4 Q About how many of them were there?

5 A Maybe eight.

6 Q Oh, shoot. That's a small group for them.

7 A Yeah. However bigger our conference room

8 was.

9 MR. SCHACHTMAN: Small by Plaintiff's
10 standards, too.

11 Q What about -- do you have any notes or
12 records of that?

13 A No.

14 Q Do you know if anybody kept any Minutes of
15 it?

16 A Not to my knowledge.

17 Q And what all was discussed?

18 A The study had been completed at that time
19 and we gave them an overview of what the study said.

20 Q And who is we?

21 A Myself and Doctor Blot.

22 Q And what did you all tell them?

23 A The study results.

24 Q And how did you all put it at that point?

25 A I don't understand.



1 Q Well, when you told them what the results
2 were, what were your words insofar as you recall?

3 A I don't recall my exact words.

4 Q They don't have to be exact, just your best
5 recollection of what you recall having said when you
6 summarized the study.

7 A You know, I don't recall my exact words.
8 I'm sure I talked about the results as they're in the
9 tables in the paper.

10 Q At that point had it been accepted for
11 publication?

12 A At that point it had not.

13 Q At that point had it been submitted to
14 publication?

15 A No, it hadn't, it had not.

16 Q Did you distribute copies of the report?

17 A Among the collaborators on the project we
18 did.

19 Q Okay. What about at the presentation --

20 A No.

21 Q -- to the lawyers?

22 A No.

23 Q Where was that presentation?

24 A In our offices.

25 Q Was it done by slide, or Power Point, or



1 what?

2 A No.

3 Q How was it done?

4 A Verbally.

5 Q So you explained a table without any kind of
6 visual aid?

7 A We had a piece of paper that we showed them
8 what the results were.

9 Q Did you put it on an overhead?

10 A No.

11 Q Okay. Do you have a copy of the piece of
12 paper that you showed them?

13 A I, I don't think so.

14 Q Where would that have gone?

15 A Into the table in the paper. The numbers
16 have not changed in the tables since that time.

17 Q Have your tables changed?

18 A No.

19 Q And this is a pre-submission table?

20 A Yes.

21 Q How many times did you present this paper
22 for publication?

23 A Once.

24 Q And to whom?

25 A You mean by journal?



1 Q Yes, sir.

2 A To the Journal of Occupational Environmental
3 Medicine.

4 Q You didn't submit it to any other journal?

5 A No.

6 Q And did you get reviewer comments?

7 A Yes.

8 Q Did it bring about changes?

9 A Minor changes.

10 Q But it did bring about changes?

11 A Yes.

12 Q Do you have a copy of the pre-change
13 article?

14 A No.

15 Q So you don't have a copy of the original
16 submission?

17 A I'm sure the journal does, but we don't.

18 Q Do you have any problem with us getting a
19 copy of it?

20 A No.

21 Q I understand you cannot recall what you
22 said. Do you remember what Mr. Blot -- Doctor Blot
23 said?

24 A At what time?

25 Q At the meeting in -- around July of 2004



1 with the lawyers.

2 A I, I don't know specifically. I don't
3 remember specifics of that meeting.

4 Q So I just want to be sure I'm understanding
5 what you're saying.

6 A Yeah.

7 Q Well, let me back up.

8 Have you ever had a meeting with eight
9 lawyers before?

10 A No.

11 Q Had you ever had a meeting where you
12 presented the findings of results of a study to
13 lawyers who represent the people who funded the study?

14 A No.

15 Q And as I understand what you're telling me,
16 is that that presentation, which was about six months
17 ago --

18 A Umh-humh.

19 Q -- you don't remember the gist of what you
20 said or what Mr. -- Doctor Blot said?

21 A As I explained previously, we, we discussed
22 what was in the tables.

23 Q And that's all you can remember that you did
24 with a room full of lawyers about a study with
25 preliminary results --



1 A Right.

2 Q -- is that correct?

3 A It was a short meeting.

4 Q How short?

5 A Maybe an hour, maybe.

6 Q Did they have any questions?

7 A No, not that I recall.

8 Q Or any comments?

9 A I can't remember specific comments. They
10 may have said some comments.

11 Q Anything that related to the nature of the
12 study, either how it was conducted, what the contents
13 of what you all had said about the study?

14 A No.

15 Q Okay. So you were in a room with eight
16 lawyers for an hour?

17 A Umh-humh.

18 Q And you don't recall any of them asking a
19 question?

20 A I don't.

21 Q And you don't recall any of them having
22 comments about a study that you all made --

23 A I don't recall specific comments.

24 Q Do you recall any general comments, or the
25 gist of any comments?



1 A Other than they were -- that the study was a
2 good study.

3 Q They thought it was a good study?

4 A I did, too.

5 Q I see. Did you design the study?

6 A The study was designed by Doctor Blot.

7 Q Did you have any input in the design of the
8 study?

9 A Not in the design, no.

10 Q Did you have any input with respect to the
11 study at all other than oversight?

12 A Yes, I did.

13 Q And what was that?

14 A I designed the statistical analyses and I
15 also wrote the original drafts.

16 Q How many drafts were there?

17 A I don't recall.

18 Q Do you still have those on your computer?

19 A No.

20 Q Does IEI still have them?

21 A No.

22 Q Do any of your Danish collaborators or any
23 collaborators have them?

24 A I don't know. They may have.

25 Q Do you have any problem with us having



1 copies of those?

2 A If they exist. Our policy is not to keep
3 drafts.

4 MR. CROSBY: I would renew my request for
5 that sort of information, please.

6 MR. SCHACHTMAN: I'll take it under
7 advisement.

8 MR. CROSBY: As well as for the initial
9 submission to the journal.

10 MR. SCHACHTMAN: I don't mean to interrupt
11 you, Mr. Crosby.

12 MR. CROSBY: That's okay.

13 MR. SCHACHTMAN: But you do have -- I think
14 I provided to you the reviewer comments and the
15 proposed changes in response to the reviewer comments.
16 That probably defines the entire universe of changes
17 between the submitted draft and the accepted draft.

18 MR. CROSBY: I appreciate your assistance
19 there, and I do have that, but unlike some folks, I
20 wasn't in the meeting in July, and so that may be my
21 only way to find out.

22 BY MR. CROSBY:

23 Q And how long was it after the meeting that
24 the proposed publication was submitted?

25 A Oh, I think it was first submitted in



1 August, late August or early September.

2 Q Is there a reason that you presented the
3 results to the group of lawyers before you submitted
4 it for publication?

5 A No.

6 Q Is that your usual practice, to submit a
7 paper to a funder or partial funder prior to
8 submitting for publication?

9 MR. SCHACHTMAN: Objection --

10 A No.

11 MR. SCHACHTMAN: -- to the form.

12 Q What is your usual practice?

13 A As we state in our proposal and in our
14 contracts, that we publish results no matter what they
15 are.

16 Q I understand that. But -- and what is your
17 usual practice with respect to whether or not you do a
18 presentation about a study before you submit for
19 publication?

20 A Our usual practice is to give the funder the
21 final copy of the paper.

22 Q That is, as accepted --

23 A Right.

24 Q -- by the publisher?

25 A Right.



1 Q So normally you would submit the paper, have
2 it accepted by a publisher, go through the review
3 process, make the changes, then when it is finally
4 accepted by the publisher and you have the galley
5 proofs of what will be published, that is what you
6 then submit --

7 A No.

8 Q -- to --

9 A Typically we give them the first draft, the
10 first, you know, the first submission to the journal.

11 Q Okay. So then the process would normally
12 be, instead of in this case, you would have had it
13 accepted by the publisher, first draft in July, and
14 then maybe in August you would have met with the
15 funders?

16 A Right. We haven't given the funders the
17 final paper yet.

18 Q Okay. What is it that we have?

19 A You have what's been accepted by the
20 journal.

21 Q Okay. And the final paper would be what --
22 are there changes that may occur between the paper as
23 accepted and what's published?

24 A Yeah. There may be some superficial
25 changes, and the gallies may have the tables



1 misaligned or something like that.

2 Q But normally speaking, as I understand it,
3 you would first have, for example, what we now have --

4 A Umh-humh.

5 Q -- before you presented it to the funders?

6 A We -- what we would do is we would take our,
7 our final paper, submit it to the funders along with
8 our final bill. And they don't have the final bill
9 yet, I don't think.

10 Q We'll mark this a little later.

11 A Okay.

12 Q I just want to understand if that is what
13 you would call the final paper.

14 A Let me make sure I --
15 (Witness reviewing document.)

16 A Is this part isn't (indicating). Just the
17 first part is.

18 Q All right.

19 A Yeah, Page 25.

20 Q So until we get to the Protective Order --

21 A Umh-humh.

22 Q -- that's the final paper?

23 A Right.

24 Q And as I understand it, normally that is
25 what would be presented to a funder?



1 A I -- I'm not saying that we would not talk
2 to the funder through the process, but we would submit
3 the final paper along with our final payment -- or
4 final invoice.

5 Q And as final paper, and I'm -- I don't mean
6 to be splitting frog's hairs here, but I'm trying to
7 be sure I understand what's a final paper.

8 A Umh-humh.

9 Q Because you just indicated, I thought, that
10 you had not yet submitted the final paper to the
11 welding industry.

12 A Right.

13 Q Okay. So then what is this?

14 A That's the final paper. But I don't know
15 why Doctor Blot hasn't submitted it yet.

16 Q Well, do you know how the welding industry
17 may have gotten copies of it?

18 A We gave it to them.

19 Q Okay. Who gave it to them?

20 A IEI, either Doctor Blot or myself.

21 Q Then what do you mean by saying you don't
22 know why Doctor Blot hasn't given it to them?

23 A I'm sorry. What I'm saying is that our --
24 we are talking about our normal process.

25 Q Yes, sir.



1 A And as part of our normal process, our
2 invoicing process, we submit the last invoice along
3 with the final paper. This is the final paper that
4 you have. Because of this Protective Order in this
5 litigation, you wanted a copy of what the final paper
6 would look like in the journal, so we supplied this.

7 Q All right. So normally speaking, a funder
8 would get a copy of the final paper at what point?

9 A On the conclusion of the study.

10 Q Is the study concluded?

11 A Absolutely.

12 Q And when was it concluded?

13 A When we did the final changes on this paper,
14 which I think was October.

15 Q Okay. So let me try to get the sequence
16 right.

17 A Umh-humh.

18 Q And excuse my inability to understand.

19 Would you normally give a copy of the final
20 paper to a funder only after you had made the final
21 changes as required by the publisher?

22 A You know, I -- it varies by project, because
23 some projects they don't want the paper, they just
24 want a report. And it varies by project.

25 Q One other point I forgot to tell you, if

1 there's a point at which you would like to take a
2 break for any reason, just let us know.

3 A Okay.

4 MR. CROSBY: Do you all have a break
5 schedule that you --

6 MR. SCHACHTMAN: No. I just figured we'd go
7 about ninety minutes or so and give the reporter a
8 chance to put her fingers in ice.

9 BY MR. CROSBY:

10 Q What all did you review, if anything, prior
11 to commencing the study that the industry funded on
12 welding?

13 A I reviewed some prior studies on welding and
14 Parkinson's disease.

15 Q Do you recall which ones?

16 A The ones that are mentioned in the paper.

17 Q And you read those before you began the
18 study?

19 A Yes. Before my involvement in the study.

20 Q Was that before Doctor Blot put you in
21 charge, or after he had put you in charge?

22 A After he did.

23 Q Any meetings with defense counsel after July
24 2004?

25 A I, I think I met with Mr. Schachtman in -- I



1 think our first meeting was in November.

2 Q Of '04?

3 A Yeah.

4 Q And what was the nature of that visit?

5 A To discuss this litigation.

6 Q Do you recall what you all discussed other
7 than just this litigation?

8 A I wrote a Declaration for the court that we
9 discussed.

10 Q Do you recall what he had to say, if
11 anything, about it?

12 A Yes, some things.

13 Q Who prepared the first draft of the
14 Declaration?

15 A I did.

16 Q And then were there any other drafts?

17 A Yes.

18 Q Who all was involved in that process?

19 A In the process of preparing the drafts?

20 Q Yes, sir.

21 A Myself, Doctor Blot, Doctor McLaughlin,
22 Mr. Schachtman. And I think that's it.

23 Q What was Doctor Blot's role with respect to
24 the draft?

25 A Editing.

1 Q Do you have copies of any of those drafts?

2 A No.

3 Q Do you know if Doctor Blot does?

4 A No, because he gave his copy back to me.

5 Q And what did you do with it?

6 A I made the changes he suggested and threw it
7 away.

8 Q Okay. Do you remember the nature of his
9 suggestions and changes?

10 A No, I don't.

11 Q What about Doctor McLaughlin, what role did
12 he play?

13 A The same as Doctor Blot, editing.

14 Q And do you have a copy of the draft where he
15 had his comments?

16 A No.

17 Q Do you recall what areas he had comments and
18 changes?

19 A Probably more grammatical.

20 Q Why would you think that Doctor Blot would
21 be dealing with substance and Doctor McLaughlin would
22 be dealing with language?

23 A He's a stickler for that.

24 Q And what about Mr. Schachtman, what was his
25 role?



1 A He reviewed what I wrote and offered some
2 suggestions.

3 Q Do you recall what his suggestions were?

4 A Not specifically.

5 Q Do you recall generally?

6 A About the wording of some of the comments.

7 Q Do you recall what, wording about what
8 comments?

9 A I don't recall specifically what comments,
10 no.

11 Q Do you recall any general comments about his
12 suggestions?

13 A No, other than he liked what I had written.

14 Q He did. Had you ever given a declaration
15 for a court before?

16 A No.

17 Q Did you find the process interesting?

18 A Not particularly.

19 Q Did you find it unique?

20 A No.

21 Q What did you find it to be similar to in
22 your experience?

23 A Probably similar to writing a scientific
24 abstract.

25 Q And when you get the reviewer's comments



1 back you make changes or don't make changes in a
2 scientific abstract, right?

3 A If you don't make changes you have to
4 justify why not.

5 Q Did Doctor Blot or Doctor McLaughlin expect
6 you to do that with them with respect to their
7 suggestions?

8 A Their suggestions weren't substantial enough
9 to warrant big changes in the Declaration.

10 Q What about Mr. Schachtman's?

11 A The same.

12 Q But you don't recall what they were?

13 A Not specifically, no.

14 Q Do you recall how much time you spent doing
15 that?

16 A I, I billed him for the time, so you have a
17 copy of my bill.

18 Q Do I have a copy of all of your bills --

19 A Yeah.

20 Q -- relating to this?

21 A To these, yeah.

22 Q What is your normal hourly billing rate?

23 A It's IEI's billing rate. I don't collect
24 the monies myself. So I think they charged me at four
25 hundred dollars an hour.



1 MR. CROSBY: Let me show you what I will
2 mark as Exhibit 1, please. Would you hand me some of
3 those?

4 THE WITNESS: These (indicating)?

5 MR. CROSBY: Yes.

6 (Deposition Exhibit No. 1 was marked for
7 identification and was attached to the transcript.)

8 BY MR. CROSBY:

9 Q That's a copy of -- excuse me.

10 MR. CROSBY: Do you want a copy?

11 MR. SCHACHTMAN: Oh, thank you.

12 MR. CROSBY: Sure.

13 BY MR. CROSBY:

14 Q -- invoices or statements that I've
15 received. Could you tell me which one of those, if
16 any, relates to your preparation of the Declaration?

17 A Yeah. The first one, the one on the top.
18 January 10th, 2005.

19 Q So it's twenty-one hours?

20 A Correct, yes.

21 Q What does Doctor McLaughlin bill at?

22 A I have no idea.

23 Q How about Doctor Blot?

24 A No idea.

25 Q If you'll look at the second page, please,



1 sir.

2 A Umh-humh (complying).

3 Q It's a statement for fifty-seven thousand,
4 nine hundred and forty dollars?

5 A Umh-humh.

6 Q Dated September 29, 2003?

7 A Yes.

8 Q At what point were you in the study there?

9 A Oh, I think probably it was December or
10 January, December of 2003, January of 2004, around
11 that time.

12 Q But I'm looking at a bill for September
13 2003.

14 A Right.

15 Q So does that mean that the roughly fifty-
16 eight thousand dollars was an initial payment before
17 anything had been undertaken?

18 A Oh, no. There is a huge undertaking by the
19 Danes to assemble the data, actually, first approved,
20 to get approval for using the data, and then to
21 assemble the underlying hospitalization data.

22 Q Had IEI undertaken anything at this point?

23 A Other than initial meetings, no.

24 Q Does IEI generate any itemized bill for the
25 work done, or do they just send the bill for roughly



1 fifty-eight thousand dollars?

2 A I'm not in charge of billing, so I don't
3 know.

4 Q I understand you're not in charge of it.
5 But you don't have any understanding as to whether or
6 not an IEI bill submits the amount of time spent by
7 IEI personnel or others, or copies of receipts for
8 monies expended, or invoices from third parties for
9 services rendered or items provided?

10 A I have no knowledge of that at all.

11 Q How long have you been working there?

12 A Since '97, 1997.

13 Q Do you all have any kind of production or
14 billing goals at IEI?

15 A No, not that I'm aware of.

16 Q So if you go to work at IEI -- what's your
17 normal workday?

18 A It varies from day to day.

19 Q Is there a time you're expected to be at
20 work?

21 A Yes.

22 Q What time?

23 A Between eight and nine in the morning.

24 Q Is there a time you're expected to be at the
25 office or to be engaged in work during the day?



1 A Between then and six, five, six p.m.

2 Q Okay. And I take it there are many days
3 where you work many more hours than that?

4 A Correct, yes.

5 Q Do you keep a timesheet?

6 A We do keep a timesheet for our NIH funding.

7 Q How about for matters such as the welding
8 industry study?

9 A No.

10 Q So how did you know that you spent twenty-
11 one hours doing the Declaration?

12 A This was for the litigation, that we did
13 keep track of. But for the actual study, we don't.

14 Q Okay. So did you do a time --

15 A Because it's an hourly rate.

16 Q Because what's an hourly rate?

17 A The work on the Declaration was.

18 Q Okay. Well, wasn't the work for the study
19 projected on an hourly basis?

20 A Not to my knowledge. I think in the
21 proposal he put some hourly estimates.

22 Q And who is he?

23 A Doctor Blot.

24 Q What's your best judgment as to how many
25 hours you spent working on the welding industry study



1 in Denmark?

2 A Well, when we did the initial analysis and
3 paper writing, I was there for a week. So probably
4 fifty or sixty hours that week.

5 Q All right.

6 A Before and after that, I'm not sure.

7 Q How about overall, how many hours do you
8 feel like you put into the study that were, you know,
9 legitimate --

10 A Umh-humh.

11 Q -- billable work hours?

12 A I don't think I could give you a number.

13 Q Okay. How about how many did Doctor Blot
14 put in?

15 A I don't know.

16 Q Do you know how many hours anybody at IEI
17 put in?

18 A No.

19 Q How about how much time anybody involved in
20 the study in Denmark put in?

21 A No.

22 Q With the NIH work, do they circulate a draft
23 of your compiled timesheets for that grant to be
24 submitted for you to approve?

25 MR. SCHACHTMAN: Objection to the form.



1 A I'm not sure what you're asking.

2 Q Well, you indicated, I thought, and maybe I
3 misunderstood it, that you kept time with respect to
4 NIH matters.

5 A Yes.

6 Q Does that go back to NIH for their review?

7 A You know, I'm not sure. I'm not sure.

8 Q And is it your understanding that in
9 addition to the round numbers, two hundred and eighty
10 thousand dollars that has been billed, that there is
11 yet another statement that's due to the welding
12 industry for this study?

13 A I think according to the proposal, there is.

14 Q Have you read any other expert's
15 declarations in the welding litigation?

16 A Yes.

17 Q Did you read any of them before you wrote
18 yours?

19 A No. No, I didn't.

20 Q All right. Who all's have you read?

21 A I read Doctor Wells' and Doctor Louis'.

22 And you're asking me before I wrote my

23 Declaration?

24 Q Yes, sir.

25 A Yeah. I think that's it.



1 Q Okay. So --

2 A I'm trying to recall exactly when I read
3 them and when I wrote my Declaration. It was all
4 around the same time.

5 Q All right. Did anybody give you any
6 guidance as to what was to be contained in your
7 Declaration?

8 A No.

9 Q So --

10 A It was my understanding that I would write
11 about -- that I was going to discuss the study that I
12 did.

13 Q And what is your understanding as to why you
14 were going to be called as an expert witness in this
15 case?

16 A Because the study wasn't in the public
17 domain yet, it hadn't been published in the
18 literature, and in case there were questions about
19 that, that they wanted to use me as an expert witness.

20 Q Is it your understanding, or do you intend
21 to offer any testimony concerning studies published by
22 any other person or entity with respect to health
23 effects of welding?

24 A I'm going to only discuss my study.

25 Q Have you formed any opinions with respect to



1 any studies other than yours concerning health effects
2 of welding fumes?

3 A I have not, no.

4 MR. CROSBY: All right. So he's limiting
5 himself to just his study?

6 MR. SCHACHTMAN: As are we.

7 MR. CROSBY: All right. If you want, we
8 could take that break now.

9 MR. SCHACHTMAN: Absolutely.

10 MR. CROSBY: Great.

11 THE VIDEOGRAPHER: We are going off the
12 video record. The time is 10:20 a.m.

13 (A short recess was taken.)

14 THE VIDEOGRAPHER: We are back on the video
15 record. The time is 10:39 a.m.

16 BY MR. CROSBY:

17 Q All right. We're back on the record. Still
18 under oath, all right?

19 A Okay.

20 Q All right. Now, after reading Doctor Wells'
21 and Doctor Louis' Declarations sometime around --
22 before or after you did your Declaration, have you
23 read anybody else's declarations?

24 A I read David Garabrant's Declaration a
25 couple weeks ago.



1 Q Did you form any impressions or opinions
2 concerning what he stated in his Declaration?

3 A Yes, I -- it's a difficult question.

4 Q Okay.

5 A Yes, I had thoughts about his. . .

6 Q Do you plan on expressing any of those
7 thoughts with respect to his Declaration in any
8 subsequent declaration or in any testimony?

9 A No.

10 MR. CROSBY: Is that correct, are you all
11 going to elicit anything?

12 MR. SCHACHTMAN: I'm not going to ask him
13 for those opinions, so if I do, they'll be
14 nonresponsive answers.

15 MR. CROSBY: All right.

16 BY MR. CROSBY:

17 Q With respect to any other declarations,
18 besides Doctor Wells, Doctor Louis and Doctor
19 Garabrant, have you read any?

20 A Not for this case, for this litigation.

21 Q Okay. Have you read any for any other
22 litigation?

23 A I have.

24 Q And what litigation is that?

25 A I think I -- back when I, I looked at the



1 litigation I worked on in the Nineties, I think I, I
2 read some affidavits then. But I can't recall
3 exactly.

4 Q Okay. Would that have been the Superfund?

5 A Superfund, yeah. I think I did.

6 Q Have you read any briefs that have been
7 filed in this case?

8 A No.

9 Q Have you ever read a legal brief before?

10 A I have not, no.

11 Q How about any deposition transcripts?

12 A Yeah.

13 Q Okay.

14 A I have. Yes, I have.

15 Q Okay. Whose deposition transcripts have you
16 read?

17 A Doctor Wells', Doctor Louis'.

18 Q How about Doctor Garabrant's?

19 A Yes, I did read his as well.

20 Q Anybody else's?

21 A Not for this litigation.

22 Q Okay. What litigation have you read
23 deposition transcripts before?

24 A Probably the past litigation I worked on for
25 the Superfund sites.



1 Q How about trial transcripts, have you read
2 any trial transcripts?

3 A No.

4 Q Speaking of trials, this is a question that
5 we lawyers have to ask, and it's not meant to do
6 anything other than just do what lawyers have to do,
7 somewhat like what doctors have to do when you go into
8 a hospital, and some of it's not fun.

9 Have you ever been convicted of a crime?

10 A No.

11 Q Have you ever been charged with a crime?

12 A No.

13 Q What else have you read with respect to
14 preparing for your Declaration or this deposition
15 other than the transcripts that we discussed, the
16 Declarations we discussed, and the articles that are
17 referenced in your Declaration and in your paper?

18 A Nothing else.

19 Q With respect to the papers that you read
20 dealing with welding fumes and health aspects --

21 A Umh-humh.

22 Q -- did you do any power analysis of any of
23 those?

24 A Of the studies?

25 Q Yes.



1 A No.

2 Q Did you ever do any power analysis with
3 respect to the Danish study you did for the welding
4 industry?

5 A No.

6 Q Did you do a pre-study power analysis with
7 respect to that study?

8 A No.

9 Q Did Doctor Blot?

10 A No, he did not.

11 Q Did anybody do one?

12 A No.

13 Q Has anybody done a post-study power analysis
14 of the Danish study you all did for the welding
15 industry?

16 A There was no need to. We had the study
17 results.

18 Q I understand your opinion on that.

19 A Umh-humh.

20 Q But what I'm asking is whether or not you
21 did it.

22 A It was not done, no.

23 Q Okay. Do you know if anyone has done that?

24 A I know Doctor -- I think Doctor Louis wrote
25 about a power calculation he did. It was either



1 Doctor Louis or Doctor Wells.

2 Q Since the Declaration in November when you
3 spent approximately twenty-one hours, how many hours,
4 if any, have you spent involved in welding research or
5 endeavors for anybody?

6 MR. SCHACHTMAN: Objection to the form.

7 A I'm not sure what you mean by welding
8 research.

9 Q Have you done anything pertaining to health
10 aspects of welding fume exposure since your
11 Declaration was finished?

12 A Yes.

13 Q Okay. What is that?

14 A We've designed a study for Sweden, to look
15 at welders in Sweden.

16 Q What about with respect to litigation?

17 A I'm not sure what you're asking.

18 Q All right. Have you spent any time
19 reviewing anything for which you're going to charge
20 somebody with respect to the litigation since you
21 finished your Declaration?

22 A I've not reviewed anything for money since I
23 finished my Declaration.

24 Q Okay. Have you reviewed anything relating
25 to health aspects of welding fume exposure since your



1 Declaration for any purpose, other than for the
2 Swedish study?

3 A Yeah, nothing other than the declarations
4 and the depositions that we discussed earlier.

5 Q Okay. And how much time since you finished
6 your Declaration have you spent either doing research
7 or reviewing literature or transcripts or declarations
8 relating to this litigation since you finished your
9 Declaration?

10 MR. SCHACHTMAN: Objection to form.

11 A I'm not sure of the exact number of hours,
12 but -- I'm not sure of the exact number of hours.

13 Q Since your --

14 A But some.

15 Q Okay. Have you written it on a timesheet
16 somewhere?

17 A Yeah.

18 Q Okay. And do you still have those
19 timesheets?

20 A It's -- it would be an email that I would
21 send to Doctor Blot.

22 Q Have you met with anyone in preparation for
23 this deposition today?

24 A Yes.

25 Q And who all was that?



1 A Mr. Schachtman and Erika Doherty.

2 Q And when did you all meet?

3 A It was last Thursday.

4 Q And where were you?

5 A Here.

6 Q And how long did you all meet?

7 A It was about four hours, four or five hours.

8 Q Okay. And what all did you all discuss?

9 A The deposition.

10 Q What aspects of it?

11 A How to dress, how to -- you know, what the
12 deposition would entail, those type of issues.

13 Q Did you discuss your study?

14 A A little bit, yes.

15 Q What aspects of the study did you all
16 discuss?

17 A Just, just the basic, you know, what I would
18 say about the study.

19 Q And what did you say that you would say?

20 A That it was an excellent study.

21 Q And is that your own humble opinion?

22 A Absolutely.

23 Q And what else, if anything, did you discuss
24 about the study?

25 A We also looked at other depositions and read



1 through what other people had written about the study.

2 Q Okay. Which ones did you all read through
3 about the study, what depositions?

4 A Doctor Louis' and Doctor Wells'.

5 Q Okay. And did you go over their
6 Declarations as well?

7 A I think I just looked at the depositions.

8 Q And what were the comments by the lawyers or
9 your comments about Doctor Wells' statements
10 concerning your study?

11 A I'm not sure what you're asking.

12 Q Maybe I misunderstood. Did you all discuss
13 Doctor Wells' deposition and comments he made
14 concerning your study?

15 A Yes.

16 Q Okay. What comments of Doctor Wells did you
17 all discuss?

18 A The comments that pertained to me.

19 Q Okay. And what were they? What did he --
20 what was the gist of his comments about --

21 A Doctor Wells?

22 Q Yes.

23 A I can't recall them off the top of my head.
24 You have them in the deposition.

25 MR. SCHACHTMAN: Let me just -- if I may.



1 MR. CROSBY: Sure.

2 MR. SCHACHTMAN: I don't think much turns on
3 it, but Doctor Wells has not testified, and I think
4 the witness is referring to the Declaration that he
5 reviewed, and I think he's just confused what a
6 declaration is and what a deposition is.

7 MR. CROSBY: Okay. Thank you.

8 BY MR. CROSBY:

9 Q Have you -- does that help refresh your
10 recollection?

11 A Absolutely.

12 Q All right. Now, do you recall the substance
13 of what Doctor Wells said about your study?

14 A I remember him saying that it was a very
15 good cohort study.

16 Q And that was in his Declaration?

17 A Yes.

18 Q And do you recall what Doctor Louis said?

19 A Not specifically, no.

20 Q Do you recall anything that Doctor Wells
21 said about your study that you disagreed with?

22 A I think I disagreed with all of his
23 comments.

24 Q Okay. And what about Doctor Louis, was
25 there anything that he said about your study with



1 which you disagreed?

2 A Yes, there was.

3 Q And what all did you disagree with about
4 what Doctor Louis said?

5 A Some of his specific comments about my
6 study.

7 Q How many declarations of Doctor Louis have
8 you read?

9 A To my knowledge, just one.

10 Q And how many declarations of Doctor Wells
11 have you read?

12 A One.

13 Q And what about Doctor Garabrant?

14 A I guess I'm confused about what --
15 deposition and declaration, so. . .

16 Q A deposition --

17 A I know I read his deposition.

18 Q Okay. A deposition is typed up on a piece
19 of paper and they double space everything and it
20 usually says Q for a question and a question's typed
21 out, and then they'll be skipping down, have an A, and
22 then it will have an answer for what somebody said.
23 So it's a question and answer process, reads like a
24 script.

25 A Yeah. I think I read both Doctor



1 Garabrant's Declaration and deposition.

2 Q Okay. And was there anything that Doctor
3 Garabrant said about your study with which you
4 disagreed?

5 A No.

6 Q Is there anything that he said that you
7 agreed with?

8 A Yes.

9 Q Do you recall what it is that you agreed
10 with?

11 A His -- the specifics I don't, unless you
12 read them to me.

13 MR. CROSBY: Okay. I'd renew the request
14 for the information relating to billing, please.

15 Q Do you have any notes of any conversations
16 with any of the counsel that you've met with?

17 A No.

18 Q How about any correspondence or emails,
19 anything like that?

20 A I have emails that pertain to where the
21 deposition would be held and things like this.

22 Q Anything dealing with health aspects of
23 welding fumes, or studies or declarations relating to
24 health aspects of welding fumes?

25 A Yes.



1 Q Emails?

2 A Yeah.

3 Q Okay. From counsel?

4 A Yeah.

5 Q And do you know where those are?

6 A Yeah, I have them.

7 MR. CROSBY: Okay. I'll renew the request

8 for those, please.

9 MR. SCHACHTMAN: Let me just say that I know
10 that Messrs. Harber and Barrett had an agreement
11 reached about drafts, and if the emails he's talking
12 about - and I don't really know which ones he is -
13 relate to drafts, then I think it's covered by the
14 agreement.

15 MR. CROSBY: I'm not trying to do anything
16 that is, you know, contrary to whatever agreements
17 that our respective folks have made, but if there's
18 something that I'm entitled to have --

19 MR. SCHACHTMAN: I understand.

20 MR. CROSBY: -- I'm just asking for it.

21 MR. SCHACHTMAN: And so we'll take it under
22 advisement, and I will seek counsel from Harber and
23 you'll seek counsel from Mr. Barrett.

24 BY MR. CROSBY:

25 Q Are you currently working on any kind of



1 supplemental report?

2 A No.

3 Q Have you been asked to prepare one --

4 A No.

5 Q -- or consider one?

6 A No.

7 Q Is there -- do you have a desire to submit
8 one after having read what Doctor Wells and Doctor
9 Louis had to say?

10 A No.

11 Q Has anyone discussed with you doing any
12 study relating to health aspects of welding fumes
13 other than your Swedish study?

14 A No.

15 Q Are you familiar with any other studies
16 being conducted by any other researchers with respect
17 to health aspects of welding fumes?

18 A Other than what's been published in the
19 literature, no, no ongoing studies.

20 Q Have you sought funding for any studies
21 relating to welding fumes or health aspects of welding
22 fumes from any source other than manufacturers of
23 welding rods?

24 A No.

25 Q Have you -- are you aware of anyone



1 submitting proposals for grants to NIH or any other
2 governmental agency or institution with respect to
3 conducting a study on health aspects of welding fumes?

4 A I'm not aware.

5 Q Do you agree or disagree with this
6 statement: There is no current scientific
7 justification and no past scientific justification for
8 expensive and time-consuming analytic studies of
9 Parkinson's disease and welding?

10 A Would you repeat?

11 Q Yes, sir. There is no current scientific
12 justification and no past scientific justification for
13 expensive and time-consuming analytic studies of
14 Parkinson's disease and welding?

15 A It has a lot of qualifiers in it.

16 MR. SCHACHTMAN: Is there a time when that
17 statement was made? There's a temporality aspect to
18 it.

19 Q Let's assume it was made within the last two
20 years.

21 A Would you repeat it one more time, please?

22 Q Yes, sir.

23 A Umh-humh.

24 Q There is no current scientific justification
25 and no past scientific justification for expensive and

1 time-consuming analytic studies of Parkinson's disease
2 and welding.

3 MR. SCHACHTMAN: Objection to the form.

4 A I believe there's justification to study
5 Parkinson's disease among welders, yes.

6 Q So do you agree that there is current
7 scientific justification for expensive and time-
8 consuming analytic studies of Parkinson's disease and
9 welding?

10 A I don't know.

11 Q Do you agree that there was past scientific
12 justification for expensive and time-consuming
13 analytic studies of Parkinson's disease and welding?

14 A I, I believe there is justification for
15 studying Parkinson's disease and welding, yes.

16 Q Why do you believe that?

17 A There were some case reports that I read
18 about in the literature.

19 Q All right.

20 A And I think it would be important to verify
21 that in a more rigorous analytical method.

22 Q You know, lawyers sometimes ponder having a
23 dream case.

24 A Umh-humh.

25 Q And I'm wondering -- are you an



1 epidemiologist, or a biostatistician?

2 A Epidemiologist.

3 Q And I was wondering, do epidemiologists
4 sometimes ponder having the dream epidemiological
5 study? What would you do to design the perfect
6 epidemiological study if you could do it?

7 A It would be a cohort study.

8 Q Okay. Now, was your Danish study for the
9 welding industry, did it meet your standard for the
10 dream study?

11 A I think it's the best study to date.

12 Q Okay.

13 A It's a very powerful study.

14 Q If you could tell me, please, sir -- well,
15 did you calculate the power?

16 A I did not calculate the power, no.

17 Q Could you tell me, please, with respect to
18 going forward --

19 A Umh-humh.

20 Q -- and just disregard your Swedish proposal.
21 Let's assume that I come to you and say I want you to
22 design from scratch the best study that could be done
23 to answer the question are people that are exposed to
24 welding fumes at an increased risk for Parkinson's
25 disease, Parkinsonism, neurological problems, movement



1 disorders.

2 A Umh-humh.

3 Q Okay?

4 A (Nodding.)

5 Q What would be your first step after I said
6 money is no object, besides smiling like you just did?

7 A The first step would definitely be to
8 identify welders.

9 Q Okay. How do you mean that?

10 A Identify people who had worked in welding.

11 Q Okay. And I want to do that in the United
12 States.

13 A You do?

14 Q If I want to do that in the United States,
15 how do we do it?

16 A I don't know.

17 Q Okay. But you would go about -- how big a
18 group would you need?

19 A In order to see an effect?

20 Q Yes.

21 A I don't know.

22 Q If you did the study in any other country,
23 do you know how big a population you would need in
24 order to see whether or not there was any meaningful
25 effect that was statistically significant?



1 A Yeah, I don't think anyone could answer
2 that.

3 Q Okay. Why is that?

4 A Because there are no disease registries or
5 background rates of Parkinson's disease.

6 Q Where, in the world, or --

7 A To my knowledge, in large populations in
8 Denmark we didn't have any background rates of
9 Parkinson's disease, so there was no way to calculate
10 power.

11 Q Do you have a general understanding or
12 appreciation as to what is generally accepted as the
13 background incidence of Parkinson's disease in human
14 beings in the United States?

15 A I have no knowledge of that.

16 MR. SCHACHTMAN: Objection to the form.

17 A I have no knowledge of that.

18 Q Okay. Is that something that you looked
19 into before you -- well, is that something you've
20 looked into?

21 A Yes.

22 Q Okay. And you found nothing that indicates
23 what the incidence is?

24 A There are a few studies that show incidences
25 in some areas, but nothing for Denmark. There's no,



1 there's no disease registry of Parkinson's disease or
2 anything like that where we could estimate power from.

3 Q What about in the United States?

4 A Not to my knowledge, there's no nationalized
5 registries of Parkinson's disease.

6 Q Are there some generally-accepted numbers as
7 to what the incidence of Parkinsonism is amongst the
8 population of human beings in the United States?

9 A I, I don't know. I have no idea.

10 Q Is there any generally-accepted incidence
11 rate for the occurrence of Parkinsonism or Parkinson's
12 disease in Denmark?

13 A No, there's not. That was, was the beauty
14 of using the hospitalization, that way we could get a
15 background rate in the general population of what
16 Parkinson's disease was, looking at the disease
17 frequency of Parkinson's.

18 Q Of Parkinson's disease, for hospitalization
19 of Parkinson's --

20 A Correct.

21 Q -- disease?

22 A Yeah.

23 Q But not necessarily finding out what the
24 incidence of Parkinson's disease actually is?

25 A Well, that is an instance of Parkinson's



1 disease. That's an unbiased incidence among the
2 background population and among the welders. So that
3 way we were, you know, we were comparing like to like.

4 Q In some respects, perhaps, but we'll get to
5 all of that in a minute.

6 MR. SCHACHTMAN: Objection to form.

7 Q But what I'm asking you is your incidence
8 rate is hospitalizations in Denmark, correct?

9 A Correct, umh-humh.

10 Q It is not occurrences in Denmark?

11 A It is occurrences of Parkinson's in Denmark.

12 Q It's not all occurrences of Parkinson's
13 disease in Denmark, is it?

14 A It's hospitalizations for Parkinson's
15 disease.

16 Q And so it's limited to that?

17 A Correct.

18 Q Now, in the United States do we have any
19 sort of data that would yield that kind of

20 information, or could yield that kind of information?

21 A To my own knowledge, no, not at all.

22 Q So then we're back to designing the dream
23 study.

24 A Umh-humh.

25 Q How would you design the study to ascertain



1 whether or not there is an increased incidence or risk
2 of Parkinsonism in the United States?

3 A Umh-humh. As I said, first I'd assemble a
4 group of welders.

5 Q How big a group?

6 A As large as I could possibly find.

7 Q Well, is a dozen enough?

8 A I don't think so. It depends on the
9 magnitude of the risk you're expecting to find.

10 Q And what would be the magnitude of the risk,
11 if you have an opinion, that you would expect to find?

12 A You'd have to look in the literature and see
13 what other people have reported.

14 Q And so do you have an opinion or a view on
15 that?

16 A I don't.

17 Q Would you do a power calculation before you
18 undertook the study?

19 A If the data was available to do a power
20 calculation, I would.

21 Q Was the data available in Denmark?

22 A No.

23 Q Is the data available in Sweden?

24 A No.

25 Q Do you know of any country where the data is



1 available?

2 A No.

3 Q Do you know of any geographical area,
4 country, county, state, any geographical area where --

5 A I don't know of any registries of
6 Parkinson's disease where you could estimate an
7 incidence rate.

8 Q So does that mean that you won't be able to
9 do, or one would not be able to do the perfect
10 epidemiological study with respect to Parkinson's
11 disease or Parkinsonism and welding fume exposure?

12 A Well, you could do a power calculation now
13 because we know the background of hospitalization
14 rates of Parkinson's in Denmark. So the
15 hospitalizations of Parkinson's disease, we have that
16 background right now. We have an estimate of that.
17 And you could -- you know, if you had a similar
18 country or similar cohort, you could, you could use
19 that rate.

20 Q And that would be a suitable rate, in your
21 opinion, with respect to hospitalization for
22 Parkinson's disease?

23 A Right, if that was the outcome you were
24 studying.

25 Q Are you familiar with any studies that



1 address the incidence by which Parkinson's disease is
2 not found by means of review of hospital and medical
3 records?

4 A No.

5 Q If there were medical and scientific
6 literature published that indicated that in the area
7 of forty percent of Parkinson's disease patients are
8 not hospitalized and not captured by either hospital
9 records or medical records, would that alter your
10 opinion with respect to the reliability of medical
11 records for use in such a study in the United States?

12 A If you were looking at hospitalizations of
13 Parkinson's disease, that wouldn't alter it at all,
14 because it would be unbiased between welders and the
15 comparison population and the background population,
16 and as long as you didn't ascertain your outcome
17 differently between welders and the other -- your
18 comparison group, then there's no concern.

19 Q So that presupposes, as I understand it, by
20 epidemiologists that everybody's alike, if you're a
21 welder and you have Parkinson's disease and you don't
22 go to the doctor and you don't get hospitalized, then
23 you're going to behave just like the people who are
24 nonwelders who have Parkinson's disease and are not
25 hospitalized?

1 A I'm sorry. Can you repeat, please?

2 Q Isn't that a lot like --

3 A It's a long --

4 Q The basic premise is that we all behave the
5 same, whether you've got a welder and have Parkinson's
6 disease or a nonwelder and have Parkinson's disease?

7 A Right.

8 Q Has that been verified?

9 A I have no knowledge of that.

10 Q Okay. So that's an assumption?

11 A Right, that Parkinson's disease is similar.

12 Q And that people that have it behave
13 similarly whether they're welders or not?

14 A In terms of hospitalizations, yes.

15 Q Other than the income from performing the
16 study for the manufacturers in the Danish report, have
17 you or IEI received any other funding or monies from
18 the welding industry?

19 A No. I'm sorry, other than my preparation
20 for the deposition.

21 Q Yeah. What we've talked about?

22 A Yeah.

23 Q Has anyone else at IEI published any study
24 or report in the medical and scientific literature
25 dealing with welding fume exposure and Parkinson's



1 disease or Parkinsonism or movement disorders?

2 A Not to my knowledge, no.

3 Q How about has anybody at IEI other than the
4 study that is there now waiting to be published, have
5 they published anything dealing with maganesism?

6 A No.

7 Q In the year 2004, approximately what
8 percentage of your time was spent in consulting in
9 litigation?

10 A 2004. I had a little bit in January of
11 2004, and that was the only time. I'm sorry, except
12 for the November/December work I did for this. So
13 it's sporadic. It's not constant month to month.

14 Q What about IEI, what percentage of IEI's
15 efforts and endeavors are related to consulting in
16 litigation?

17 A I have no idea.

18 Q Are you aware of other people who are
19 employed with or by or affiliated with IEI who provide
20 services as expert consultants and witnesses?

21 A Yes, other people at IEI do.

22 Q Okay. Who is it?

23 A Pardon me?

24 Q Who else does that?

25 A Doctor Blot and Doctor McLaughlin, I

1 believe.

2 Q Okay. And are they involved in doing that
3 in welding at all other than in assisting you in --

4 A No.

5 Q What areas are they experts to testify or
6 consult?

7 A I have no idea.

8 Q Do you know what percentage of their time is
9 spent in those endeavors?

10 A No.

11 Q Do you know what percentage of the research
12 that is conducted by IEI is funded in whole or in part
13 by industry?

14 A I don't know.

15 Q Of the papers that you authored or
16 co-authored last year --

17 A Umh-humh.

18 Q -- papers, reports, whether published or
19 not --

20 A Umh-humh.

21 Q -- what percentage of those were funded in
22 whole or in part by industry?

23 A By industry? I have no idea. I would have
24 to look through my CV and tell you the numbers.

25 Q Okay. Would looking through the CV give the



1 source of the funding, or just you would look at it,
2 see it, and that would help you recall?

3 A That would help me recall. But at the end
4 of each article we acknowledge who the funders were.

5 Q That's as to published. Are all of your
6 studies published?

7 A In the last year they've been, yes.

8 Q How many papers did you publish in 2004?

9 A I don't know. I'm not sure of the exact
10 number. Ten?

11 Q How many paper -- excuse me. How many hours
12 do you work a year?

13 A Total? I don't know.

14 Q What's your average week?

15 A Probably fifty, sixty.

16 Q How many weeks vacation do you get?

17 A We're allowed, I think it's three or four.
18 Three weeks, twenty-one days.

19 Q Are you paid a flat salary?

20 A Yes.

21 Q Is there any potential for bonus?

22 A Sometimes.

23 Q And what's the basis for any bonus?

24 A I have no idea.

25 Q Have you ever gotten a bonus?

1 A Yes.

2 Q Did you get a bonus for last year?

3 A I got a small bonus, yes.

4 Q And they didn't tell you why you got it?

5 A Because they appreciated my work.

6 Q This is Pages 7 through 12, which is the

7 list; I've just given you the ones that start with

8 2004, at Item No. 36.

9 A Okay.

10 Q And if you wish, you can simply give us the

11 number.

12 (Deposition Exhibit No. 2 was marked for
13 identification and was attached to the transcript.)

14 A Could you repeat exactly what you're asking
15 me to look for, then?

16 BY MR. CROSBY:

17 Q I'm looking for the articles from 2004,
18 since, as I understand it, they were all published.

19 A Umh-humh.

20 Q And for you to tell me which ones of those,
21 No. 36 through 53, which I think may now catch some of
22 2005.

23 A Yeah.

24 Q If it does, please let me know.

25 A Some of them are just submitted or in press,



1 so they're not -- they're 2004. It's only through 40,
2 2004.

3 MR. SCHACHTMAN: He certainly had a more
4 productive year than I did.

5 THE VIDEOGRAPHER: I'm sorry. What exhibit
6 number is this.

7 MR. CROSBY: 2. I'm sorry.

8 THE VIDEOGRAPHER: That's quite all right.

9 BY MR. CROSBY:

10 Q Was No. 36 funded in whole or in part by any
11 industry source?

12 A This specific paper, no.

13 Q Were there other papers that were funded in
14 whole or in part by industry that yielded the data
15 that permitted this paper to publish?

16 A I believe so, yeah.

17 Q Okay. What about No. 37?

18 A No.

19 Q Was there data that was yielded from a
20 previously-funded study from industry that allowed
21 this paper to print?

22 A Not on this specific topic, no.

23 Q Was it from a related topic?

24 A Yes.

25 Q So would you agree that in whole or in part



1 this paper comes about with respect to funding that
2 was provided by industry?

3 MR. SCHACHTMAN: Objection; form.

4 A In a small part.

5 Q Okay. And No. 38?

6 A Again, it's similar to 37. Some of the
7 original work from this data set was through industry
8 funding. But this specific paper, no.

9 Q Who funded this study, then?

10 A 38?

11 Q Yes, sir.

12 A I believe -- I would be guessing.

13 Q Okay. Please don't guess.

14 A Okay.

15 Q No. 39?

16 A 39 was part of the same funding as 38, I'm
17 sure.

18 Q So that, in part, relates back to funding
19 from breast implant?

20 A Yeah.

21 Q And were you all funded by the breast
22 implant manufacturers?

23 A I'm not sure who, who it was specifically
24 funded by.

25 Q Whether it was their lawyers or them



1 directly or what?

2 A I don't know. It was, it was prior to my
3 joining IEI.

4 Q And you came there in '97?

5 A Yeah.

6 Q Were you recruited, or did you come to them?

7 A I came to them, yeah.

8 Q How did you hear of them?

9 A How did I hear of IEI?

10 Q Yes, sir.

11 A I knew Doctor Blot. He's a famous guy and I
12 wanted to work with him.

13 Q Where is he famous from?

14 A NCI.

15 Q The National Cancer Institute?

16 A Yeah.

17 Q What's his relationship to NIH?

18 A He worked there for many years. He retired
19 from there.

20 Q All right. No. 40?

21 A Umh-humh.

22 Q Was that funded in whole or in part by
23 industry?

24 A In part, yeah. The original underlying
25 data, but, again, not this specific paper, no.



1 Q Okay. And No. 41?

2 A 41, I don't believe was any type of funding.
3 I think that was a -- we used in-house funds for that.

4 Q And No. 42?

5 A Yeah, 42 is from industry.

6 Q Was that a hundred percent?

7 A Yes, yeah.

8 Q No. 43?

9 A 43 is a variety of sources, but part is,
10 part is from industry.

11 Q And No. 44?

12 A 44 was industry, yeah.

13 Q No. 45?

14 A 45 is part of the papers coming from a
15 similar data set as 43.

16 Q No. 46?

17 A That was, again, in-house funding, so no
18 industry.

19 Q What is the in-house impetus for the renal
20 research?

21 A Oh. We were just interested. That was a
22 topic area that Doctor McLaughlin was studying when he
23 was at NCI, so he was just interested in continuing
24 that work.

25 Q So he's another NCI grad?



1 A Yup. So is Doctor Boice and Doctor Tarone.

2 Q Did you have any affiliation with NCI?

3 A No.

4 Q No. 47?

5 A This, this was, you know, in part, again,
6 from industry.

7 Q No. 48?

8 A 48 and 47 are the same, from the same
9 database.

10 Q And No. 49?

11 A 49's from that database as well.

12 Q And that's got some industry funding, or is
13 it a hundred percent industry funded?

14 A No, some, some, very -- some of the
15 underlying data was sponsored by industry.

16 Q No. 50?

17 A That was an NIH grant.

18 Q What were the results of that one, do you
19 recall?

20 A Yeah.

21 Q What was it?

22 A People that were heavier are more likely to
23 have pancreatic cancer.

24 Q How much heavier have you got to be?

25 A Well, that's a good question. This study,



1 it linked weight retrospectively, and so we didn't try
2 to quantify weight because people lie about their past
3 weight.

4 Q So how does it help us?

5 A Pardon me?

6 Q How does it help us to know it?

7 A It's just -- actually, in the paper today
8 there was a story of obesity and this underlying
9 biosyndrome, they're calling it. I don't remember the
10 exact words, but increased risk for a variety of
11 health diseases, yeah.

12 Q Okay. And No. 51?

13 A 51 was part of -- I think some of the
14 underlying data to a similar cohort was from industry.

15 Q And No. 52?

16 A That was NIH funding.

17 Q And No. 53?

18 A NIH funding.

19 Q No. 1, of the Reviews, Case Reports?

20 A Yeah. Was that was done in '97.

21 Q Okay. Let me move down to 20 -- which is
22 No. 4, picks up with 2004.

23 A 2004?

24 Q Right.

25 A Let's see. That is a -- oh, that's an



1 editorial, and that was sponsored by industry.

2 Q And No. 5?

3 A I'm sorry. No, I'm sorry, I was misreading.

4 Q Okay. That's all right.

5 A Yeah. No. 4 in part, you know, some of the
6 data we based this on was by industry.

7 Q All right.

8 A But No. 5 was a study we had done for
9 industry, yeah.

10 Q And No. 6?

11 A No. 6 was a response to No. 4.

12 Q So was the data used in expressing that in
13 part provided by industry funding?

14 A It's, it's difficult. It's more of an
15 editorial, and I would say what we based our editorial
16 on was our analysis. We did the data that -- the
17 underlying data came from, and it came -- we collected
18 through monies from industry.

19 Q Books and chapters. Here you are with
20 Doctor Garabrant.

21 A Umh-humh.

22 Q The Epidemiology of Pancreatic Cancer. Was
23 that funded, the data that you used for writing that
24 derived in whole or in part funding by industry?

25 A No. That was an NCI grant.



1 Q If we go to the back of Page 12, we can
2 start with 2004 again. Cosmetic and Reconstructive
3 Breast Implants?

4 A Umh-humh.

5 Q In 2004?

6 A Some -- again, some of the underlying data
7 to assemble that data was sponsored by industry.

8 Q And then No. 23?

9 A That is a small grant that we got from IEI
10 in discretionary monies.

11 Q No. 24?

12 A 24, I'm not sure where their funding came
13 from. It's sponsored by Kaiser. I know that there's
14 some grant process, they got the monies through that.

15 Q And No. 25?

16 A Again, some of the underlying data, to
17 assemble the data was sponsored by industry.

18 Q Okay. Now, with respect to the ones that we
19 started with, No. 41 through 53 --

20 A Umh-humh.

21 Q -- how many of those found an increased risk
22 associated with the use of or exposure to the item
23 that you were researching?

24 A 41 to 53?

25 Q Yeah. Those are the ones we just went over.



1 MR. SCHACHTMAN: Objection to the form.

2 A Okay.

3 MR. CROSBY: Well, we can do them one at a
4 time if you want to.

5 MR. SCHACHTMAN: No, no. The problem is
6 that I'm not sure they all necessarily involve
7 exposures. Some of them are anthropomorphic measures
8 or other kinds of --

9 A Some are just descriptive studies as well,
10 they're just describing the population.

11 Q Then we'll do them one at a time.

12 A Perfect.

13 Q Okay. No. 41.

14 A Umh-humh.

15 Q Did that do an assessment as to whether or
16 not there's an increased risk?

17 A Actually, the hypothesis was that statins
18 would protect you from cancer.

19 Q Okay. And what did you find?

20 A There's -- I think he found a small -- I
21 can't recall exactly, but I think he small a small
22 protective effect.

23 Q Okay. So statin is good for you insofar as
24 cancer goes?

25 A They should put it in water.



1 Q Okay. And Parkinson's disease, we'll get to
2 that --

3 A Okay.

4 Q -- in a little bit.

5 No. 43?

6 A Umh-humh. This was, this was just a
7 descriptive paper of the type of complications that
8 you'd find after plastic surgery.

9 Q Okay. So it didn't assess whether or not
10 breast implants cause an increased risk of illness or
11 disease or anything?

12 A No. We were looking at complications that
13 were associated with the surgeries.

14 Q No. 44. Is working in the movie business
15 being assessed for whether or not there's a health
16 risk?

17 A Yes. And we did find a health risk, yes.

18 Q And what health risk was it?

19 A We found an association with AIDS and
20 suicide.

21 Q Is that work-related?

22 A We hypothesize that it's not.

23 Q And then No.45, the Reconstructive Breast
24 Implantation --

25 A Yes.



1 Q -- After Mastectomy?

2 A Here she's, she's -- it's a descriptive
3 paper; again, she's just describing the outcomes.

4 Q No. 46.

5 A Umh-humh.

6 Q What is that result?

7 A In this paper we didn't find an association
8 between antihypertensive medication and renal cell
9 carcinoma.

10 Q Okay. So then the antihypertensive
11 medication is okay insofar as kidney cancer goes,
12 according to this study?

13 A According to this study, yeah.

14 Q No. 47?

15 A 47, he describes some occupational exposures
16 that may increase your risk of chronic renal failure.

17 Q And did that include the industry that
18 funded the study?

19 A No.

20 Q No. 48. Anthropometric Measures and Risk of
21 Chronic Renal Failure?

22 A Umh-humh.

23 Q What was the result there?

24 A She did find that people who are -- had
25 higher BMIs were more likely to develop chronic renal



1 failure.

2 Q And was the industry that funded this in
3 part a place where one could have an increased BMI?

4 A No.

5 MR. SCHACHTMAN: It wasn't McDonald's.

6 Q No. 49.

7 A Umh-humh.

8 Q The Course of Renal Failure: Results of a
9 Nationwide Cohort Study.

10 A Right. This is just a descriptive paper.

11 Q Is that an assigned risk?

12 A No. We were looking at demographic
13 characteristics such as age and sex and things like
14 that, and looking to see who were more likely to get a
15 kidney transplant or die, and the rates of disease in
16 the different groups.

17 Q Did it in any way conclude whether or not
18 the person that, or entity that funded in part the
19 study was contributing to the potential for renal
20 failure?

21 A No.

22 Q Pancreatic Cancer in Residents in
23 Southeastern Michigan?

24 A Umh-humh.

25 Q Was there an increased incidence there of



1 pancreatic cancer? Was that one of the purposes of
2 that study?

3 A The purpose of the study was to look at risk
4 factors that may be associated with pancreatic cancer.

5 Q Okay. Did you determine any risk factors?

6 A This paper saw an association with body mass
7 index.

8 Q Okay. Nothing that relates it to any kind
9 of industrial exposure?

10 A No, we didn't look at industry exposures
11 here.

12 Q No. 51?

13 A Umh-humh.

14 Q The Psychological and Social Characteristics
15 of Danish Women with Cosmetic Breast Implants?

16 A Umh-humh.

17 Q Psychosomatics. Does it find that people
18 who had breast implants were suffering from somatoform
19 disorders?

20 A We just -- again, we just described
21 characteristics of the patients.

22 Q Did you make any attribution as to whether
23 or not these people have an increased incidence of
24 somatoform disorders as a result of their breast
25 implants?



1 A It was just a descriptive paper. We didn't
2 have a comparison population.

3 Q Okay. Seriom -- Serum DDE and Risk of
4 Pancreas Cancer?

5 A Umh-humh.

6 Q Was there an association?

7 A Yes.

8 Q Where does one find serum DDE?

9 A Everywhere, in your food, in the
10 environment, in water.

11 Q Does --

12 A Everyone's been exposed to it.

13 Q It's ubiquitous?

14 A Absolutely.

15 Q Is it a manmade ubiquitous chemical?

16 A Yes.

17 Q Is it one with which we could do without if
18 we wished to remove it?

19 A I would say no.

20 Q And then No. 53, Use of Non-Aspirin NSAIDS
21 and Risk of Lung Cancer.

22 A Umh-humh.

23 Q What did that?

24 A The goal of that study was -- is through an
25 NCI-sponsored study to see if NSAIDS can protect you

1 against lung cancer.

2 Q And what did you find?

3 A The study, I think -- I believe I found no
4 protection. I, I can't recall exact specifics.

5 Q And speaking of lung cancer, in a cohort of
6 American males who don't smoke, the relative risk is
7 one. What is the relative risk of a population of
8 American men who do smoke?

9 A I don't know exactly what that risk would
10 be.

11 Q What excess incidence or what fold risk or
12 percentage of increased risk do you expect to see of
13 lung cancer in human beings that smoke over human
14 beings that don't?

15 A I don't know.

16 Q What about over the general population?

17 A The excess risk?

18 Q Yes, sir.

19 A It's not something I've studied.

20 Q Okay. What about -- so you wouldn't have a
21 view one way or the other with respect to one-pack-a-
22 day or two-pack-a-day smokers over the general
23 population in the U. S.?

24 A Right.

25 Q What about in Denmark?



1 A In, in our paper we, we looked at the
2 prevalence of smoking among the welders and among the
3 general population, and found them both to be around
4 fifty percent, fifty-three percent.

5 Q Half of them smoked?

6 A Yes.

7 Q Now, then, did you study what the incidence
8 of lung cancer was in Denmark with respect to
9 nonsmokers as opposed to smokers?

10 A I did not study that, no.

11 Q Are you familiar with whether or not the
12 data in Denmark are consistent with the data in the
13 U. S.?

14 A I, I -- I'm not sure what the data in the
15 U. S. is or Denmark, so it's not something I've
16 studied.

17 Q Have you ever heard that the risk of
18 smoking -- or smoking increases your risk of
19 contracting lung cancer by at least five- and usually
20 tenfold?

21 MR. SCHACHTMAN: Objection to form.

22 A I have not heard those exact words.

23 Q Anything similar to it?

24 A Yes.

25 Q What have you heard that's similar to that?



1 A Smoking increases your risk of lung cancer.

2 Q But by how much you don't know?

3 A No.

4 THE VIDEOGRAPHER: Gentlemen, I'm sorry.

5 We're going to have to change the tape.

6 Here ends Tape No. 1 in the deposition of

7 John P. Fryzek, Ph.D. We are going off the record.

8 The time is 11:33 a.m.

9 (Discussion off the record.)

10 THE VIDEOGRAPHER: Here begins Tape No. 2 in

11 the deposition of John P. Fryzek, Ph.D. We are back

12 on the record. The time is 11:40 a.m.

13 BY MR. CROSBY:

14 Q Doctor, you still doing all right?

15 A I'm fine.

16 Q Okay. When did Doctor Blot leave NIH? Or

17 was he NCI, or NIH, or both?

18 A It's -- NCI is a branch of NIH.

19 Q Okay.

20 A I think he left in '94, but I'm not sure.

21 Q And when did Doctor McLaughlin leave?

22 A At the same time. They left to form IEI.

23 Q To form the business?

24 A Yeah. And Doctor Blot retired.

25 Q Did Doctor McLaughlin retire?

1 A No.

2 Q Have you ever heard of a
3 neuroepidemiologist?

4 A I don't know any.

5 Q Have you ever heard of the term?

6 A No.

7 Q Your affiliation with Vanderbilt, I want to
8 talk about that a little bit. All right?

9 A Okay.

10 Q What is your responsibility with Vanderbilt?

11 A Currently it's just working on grants.

12 Q And what does that mean?

13 A Managing grants or the research that's going
14 on around grants, writing reports -- or not reports,
15 but scientific articles, things like that.

16 Q Are you paid by Vanderbilt?

17 A Yes.

18 Q Okay. What is your salary from Vanderbilt?

19 A I don't wish to disclose that.

20 Q Does that salary come directly to you?

21 A Yes.

22 Q Are any of the papers that you've published
23 that are on your CV included in what's funded through
24 Vanderbilt?

25 A Yes.



1 Q Were any of the ones that we just went
2 through for the year 2004?

3 A Yes.

4 Q Which ones were those?

5 A Actually, I don't think 2004, but the ones
6 that have been submitted.

7 Q Okay. All of them?

8 A No.

9 Q Okay. What department are you affiliated
10 with?

11 A Medicine, Department of Medicine.

12 Q And what do you do? Do you teach?

13 A Not at this time.

14 Q Did you used to teach?

15 A I used to teach, yes.

16 Q At Vanderbilt?

17 A No.

18 Q Okay. How long have you been affiliated
19 with Vanderbilt?

20 A I think it's been two years.

21 Q And is there a term limit on how long you
22 will be affiliated with them?

23 A Not to my understanding.

24 Q Do you have any kind of employment contract
25 or agreement with them?



1 A I, I don't have anything that I've signed,
2 no.

3 Q Okay. Have they submitted something to you
4 to sign?

5 A I can't recall.

6 Q Do you have an employment contract with IEI?

7 A In terms of a formal signature, no.

8 Q Do you have anything that provides you with
9 your job description and duties and
10 responsibilities --

11 A No, I don't.

12 Q -- with IEI?

13 A No.

14 Q Do you have any kind of written
15 understanding with them?

16 A Nothing written, no.

17 Q Do you have any kind of oral understanding
18 with them?

19 A Yes.

20 Q What is your oral understanding with them?

21 A With --

22 Q IEI?

23 A -- IEI? That I would work as a researcher.

24 Q Okay. Does it involve what you would get
25 paid as a salary?



1 A My salary, I would be paid for doing
2 research, yes.

3 Q And what is your salary with IEI?

4 A I don't wish to disclose that.

5 Q I understand that. Are you refusing to?

6 A I would not like to.

7 Q I know. There are a lot of things that we
8 don't like to do.

9 A I don't feel I need to.

10 Q I don't like to strip down in a hospital,
11 but sometimes I have to.

12 A Umh-humh.

13 Q So are you refusing to do that?

14 A Yes.

15 Q Okay. And are you refusing to disclose your
16 income from Vanderbilt?

17 A Yes.

18 Q And what about any other source of income?

19 A Yes.

20 Q Do you have any other sources of income?

21 A Personally, no.

22 Q Is there a means by which you would have a
23 source of income that is not personal?

24 A My wife works as well.

25 Q Oh, all right. She might consider that her



1 income?

2 A She does.

3 MR. SCHACHTMAN: The State of Maryland might
4 consider it their both.

5 Q Is your position with IEI a full-time
6 position?

7 A Yes.

8 Q And --

9 A It's a combination with IEI/Vanderbilt.

10 Q How does that work now?

11 A A percentage is IEI, a percentage is
12 Vanderbilt. So a percentage of my salary comes from
13 IEI and a percentage comes from Vanderbilt.

14 Q So are you a joint project between IEI and
15 Vanderbilt?

16 A I don't understand joint project.

17 Q Well, I don't understand what the
18 relationship is. Does IEI have an agreement with
19 Vanderbilt?

20 A An agreement in?

21 Q In any way.

22 A Part of my salary comes from IEI, so I have
23 a percentage appointment at Vanderbilt.

24 Q Well, do Vanderbilt and IEI get together on
25 how much you're going to get paid?

1 A That simplifies it. It depends on what
2 research is funded and what projects I'm working on,
3 that determines how much I get from Vanderbilt.

4 Q How about just explaining it to me, keeping
5 in mind that I have trouble understanding a lot of
6 stuff here. But how about trying to explain it to me,
7 and I will try to understand the nature of the
8 relationship between IEI and Vanderbilt and you and
9 IEI and Vanderbilt.

10 A Okay. I have some projects that I work on
11 strictly for IEI and some projects that I work on
12 strictly for Vanderbilt, and the percentage of time
13 that I work on each of those projects dictates my pay
14 from those two sources.

15 Q With respect to the welding study --

16 A Umh-humh.

17 Q -- was any of that Vanderbilt related?

18 A No.

19 Q With respect to studies that are part IEI
20 and part Vanderbilt, how do you keep up with how much
21 you've spent doing for IEI and how much you've spent
22 doing for Vanderbilt?

23 A I -- I've -- my -- personally, we don't
24 divide studies like that, it's either an IEI study or
25 a Vanderbilt study. So. . .

1 Q What percentage of your time is Vanderbilt
2 related?

3 A At this time I think it's -- it changes
4 depending on what point in the projects we're at. So,
5 you know, if they need more help or if they need
6 analytical work or things like that, then I spend more
7 time there and I get paid more for that. So I believe
8 it might be twenty percent now, I think.

9 Q Do they pay you an hourly fee?

10 A No.

11 Q How is the compensation reached?

12 A It's -- you know, they have a base fee and
13 then they have a percentage of that. It's a monthly
14 payment.

15 Q Is there any kind of formal understanding
16 between IEI and Vanderbilt with respect to your duties
17 and responsibilities with either place?

18 A Other -- for Vanderbilt, my duties are
19 specified in the grants they write. So if I'm on a
20 grant it tells specifically what my duties are for
21 that grant.

22 Q And does IEI approve whether or not you can
23 undertake that?

24 A Approve -- approve, yes, I would say
25 approve.



1 Q So if IE -- let's put it this way and just
2 clarify me if I'm wrong.

3 A Umh-humh.

4 Q You work for both IEI and Vanderbilt?

5 A Umh-humh.

6 Q And you do independent work -- or work
7 independently of each on studies that you're doing for
8 one or the other?

9 A Right.

10 Q But if IEI needs John Fryzek to do
11 something --

12 A Umh-humh.

13 Q -- and what Vanderbilt is proposing that you
14 do is going to conflict with it, IEI has first call?

15 A Oh, I have no idea. That -- that's not been
16 the case.

17 Q Do you submit to Mr. Blot or anybody -- or
18 Doctor Blot or anybody at IEI what the proposal is for
19 you to do at Vanderbilt?

20 A No. I've written into proposals that other
21 people have written.

22 Q Well, what is your understanding that will
23 make sure that you don't wind up spending all your
24 time doing Vanderbilt work while IEI is paying you?

25 A The work is allocated in a manner that that



1 won't happen. You know, if, if I feel like I'm
2 spending too much time on one project I can go to them
3 and tell them.

4 Q And is that association with Vanderbilt
5 throughout IEI, or are you the only one that has that
6 deal?

7 A Some people at IEI are affiliated with
8 Vanderbilt and some people are not.

9 Q Which ones are affiliated with Vanderbilt?

10 A Doctor Blot, Doctor McLaughlin, Doctor
11 Boice, Doctor Tarone, I believe, and Doctor
12 Signorello.

13 Q And do all of you all have that same
14 arrangement insofar as IEI compensation and Vanderbilt
15 compensation?

16 A I don't know about their compensation, only
17 my own.

18 Q Are those studies that are Vanderbilt
19 studies the NIH grant studies?

20 A Most of them, yes.

21 Q Are any of them studies funded by industry?

22 A No.

23 Q Who's head of the medical school at
24 Vanderbilt?

25 A I have no idea.



1 Q Do any of the IEI personnel that are
2 affiliated with Vanderbilt teach at Vanderbilt?

3 A IEI did offer a course last summer at
4 Vanderbilt, yes.

5 Q And what was the name of the course?

6 A Let me see if I can recall. It was
7 Biomarkers in Epidemiology. I don't remember the
8 exact name of the course.

9 Q Are any members of IEI regular members of
10 the faculty that offered normal courses taught at
11 Vanderbilt?

12 A I don't know. But it's my understanding
13 that eventually we will teach courses at Vanderbilt,
14 that is the direction.

15 Q Do you all have any other affiliation with
16 any other university or college or teaching
17 institution similar to that that you have with
18 Vanderbilt?

19 A I don't, no.

20 Q Are you aware of anyone at IEI that does?

21 A I'm not aware.

22 Q Do you all talk to each other up there?

23 A We try.

24 Q The papers that you're doing for Vanderbilt,
25 do they get proofed or reviewed by IEI personnel?

1 A If the IEI personnel are working on the
2 project.

3 Q Have you ever had a paper that you did
4 for -- that's Vanderbilt affiliated that did not have
5 someone else from IEI on it?

6 A I don't think so.

7 Q Is it Doctor Blot or Doctor McLaughlin who
8 usually co-author on them?

9 A Doctor Blot, yes.

10 Q Have you ever applied to be a professor or
11 instructor at Vanderbilt or any other teaching
12 institution?

13 A I, I was assistant professor at University
14 of Nebraska Medical Center.

15 Q And when was that?

16 A 1996.

17 Q Since then, have you applied for any
18 position as an instructor or teacher or professor at
19 any other institution?

20 A No.

21 Q I don't know if I asked this. Did you ever
22 attend any medical school?

23 A No.

24 Q Did you apply?

25 A No.



1 Q Have you ever been to any Parkinson's
2 disease or movement disorder clinic in the United
3 States or Denmark?

4 A No.

5 Q Do you have an opinion whether or not
6 Parkinson's disease or Parkinson's syndrome is a
7 treatable condition?

8 A I have no opinion.

9 Q How often do you go to Vanderbilt?

10 A Not very often.

11 Q What's not often to you? As an
12 epidemiologist, you know it's all relative.

13 A Absolutely. Maybe once a year. But as I
14 stated, my understanding is that will change.

15 Q What is the expected change?

16 A I will start offering coursework at
17 Vanderbilt.

18 Q You will?

19 A That's my understanding.

20 Q Well, have you applied for the position?

21 A It's not a new position. It's part of the
22 duties that we've already. . .

23 Q Well, did somebody else cut this deal and
24 they're just letting you know that that's what you're
25 expected to do?



1 A No.

2 Q Okay. So how did it come about?

3 A It -- it's my understand -- I don't have
4 firsthand knowledge of this. It's my understanding
5 that eventually coursework in epidemiology will be
6 offered at Vanderbilt and that potentially we will be
7 involved in teaching that.

8 Q And who gave you that understanding?

9 A Doctor Blot.

10 Q Okay. And when is that supposed to be
11 implemented?

12 A I don't know.

13 Q Does anyone at IEI currently serve as an
14 instructor, teacher, professor, or any position of, I
15 guess, instruction at any university, college, medical
16 school, or teaching facility?

17 A I know that Doctor Boice, Doctor Blot and
18 Doctor McLaughlin all have -- I think even Doctor
19 Tarone have adjunct appointments at various
20 universities.

21 Q Well, does IEI have a school?

22 A No.

23 Q You all don't have a teaching facility where
24 you all teach people?

25 A No. It's very similar to the NCI or NIH,



1 it's a research organization.

2 Q Okay. But NCI and NIH are not for-profit.

3 IEI is for-profit, isn't it?

4 A Right. But you asked me about teaching.

5 Q Right. But -- so what I'm trying to figure
6 out is this. When I look at IEI it often refers to
7 you as, for example, faculty.

8 A Umh-humh.

9 Q Whose idea was it that employees of IEI
10 would be called faculty?

11 A I have no idea. That was not my decision.

12 Q Do you know why they chose that term?

13 A No.

14 Q When you introduce yourself to colleagues or
15 you're introduced to colleagues in Denmark, are you
16 introduced as a faculty member of IEI?

17 A No.

18 Q But you hold yourselves out at IEI as being
19 faculty members, right?

20 MR. SCHACHTMAN: Objection to form.

21 A I don't.

22 Q It's on the website.

23 A I, I have no control over what's on the
24 website. Sorry.

25 Q Is that something you'd rather not be there?



1 MR. SCHACHTMAN: Objection.

2 A I have no feelings one way or the other. It
3 does not bother me.

4 Q Does IEI have a mission statement?

5 A Nothing that they've printed and given to
6 me.

7 Q Have they given you one orally?

8 A No.

9 Q When an article says that it is, quote,
10 funded, closed quote, by IEI, what does that mean?

11 A I don't know unless you tell me the article
12 and in what context.

13 Q Okay. So the phrase funded by IEI can mean
14 different things --

15 A Absolutely.

16 Q -- depending on the context?

17 A Yes.

18 Q What other -- well, have we gone over the
19 different industries, or all the different industries
20 that IEI currently receives funding for research on?

21 A I don't believe so.

22 Q Okay. Which ones are there that we haven't?

23 A Let's see. We've done work for Boeing,
24 Lockheed Martin. I said the National Institutes of
25 Health. The government of Sweden. Deluxe Studios.

1 The government of France. And I think that's all I
2 can recall right now.

3 Q The data that deals with this study, what's
4 been provided to me, in essence, is - and if I leave
5 something out, let me know, I don't think I will - is
6 a letter to the editor of the journal.

7 A Umh-humh.

8 Q With your comments concerning suggestions
9 and changes with an attached draft.

10 A (Nodding.)

11 Q Your proposal to the industry.

12 A Umh-humh.

13 Q Your agreement with your Danish cohort.

14 A Yes.

15 Q Your -- or colleagues, I suppose, although
16 they'd be a cohort too, wouldn't they?

17 A I guess, yes.

18 Q Okay. So -- I think that's all that I have.
19 Is that all that you have?

20 A That's all.

21 MR. SCHACHTMAN: Mr. Crosby, I believe that
22 I sent to you --

23 MR. CROSBY: That's what I can't remember.

24 MR. SCHACHTMAN: -- the questionnaire.

25 MR. CROSBY: Yes. You know, that is great.



1 I'm glad you brought that up.

2 MR. SCHACHTMAN: In Danish.

3 MR. CROSBY: Yes. Well, I was going to ask
4 you. Let me show you No. 3.

5 (Deposition Exhibit No. 3 was marked for
6 identification and was attached to the transcript.)

7 BY MR. CROSBY:

8 Q I've marked that as Plaintiff's Exhibit No.
9 3.

10 A Okay.

11 Q Could you tell us what that is, please?

12 A This is the questionnaire that was
13 administered to the welders in 1985 or '86.

14 Q Is that in -- what language is that in? I
15 don't, I don't doubt my colleague. I just --

16 A It's in Danish.

17 Q It's in Danish?

18 A Yeah.

19 Q He might speak it for all I know. Do you?

20 A No.

21 Q You do not?

22 A I can say hello.

23 Q What is hello in Danish?

24 A Goddag.

25 Q Sounds like good night, doesn't it?

1 A Good day.

2 Q So do you have a translation of this?

3 A I don't. To my knowledge, there's no
4 translation to this questionnaire.

5 Q And you're not able to translate it?

6 A Right.

7 MR. SCHACHTMAN: Ya is yes and nej is no.

8 Q So did you undertake any effort to ascertain
9 the quality of the information sought by the
10 questionnaire other than what's in the article that's
11 published?

12 A Yeah. That was done by the researchers in
13 '86.

14 Q Okay. Was there --

15 A Doctor Hansen.

16 Q Was there any effort in your paper before or
17 during to do any follow-up with respect to another
18 questionnaire?

19 A No.

20 Q So your reliance on the response to the
21 questionnaire in '86, as reflected in the '86 study,
22 is what you relied on with respect to the information
23 that came from the questionnaire in your Danish welder
24 study for industry?

25 A Right.

1 Q The data that was used that's in the
2 registries, how does one go about, if one wants to,
3 accessing that data that you had access to to assess
4 the content of the data?

5 A Umh-humh. First, I personally didn't have
6 access to the data.

7 Q Right.

8 A Our Danish colleagues did.

9 Q Umh-humh.

10 A The first thing you would do would be to
11 write an application to the Danish government, a part
12 of the government that's called the National Board of
13 Health and Welfare, and you go through an approval
14 process to use the data.

15 Q Okay. So the approval process is to use the
16 paper -- use the data but not access it?

17 A Right.

18 Q Okay. Who is the person that controls the
19 registry?

20 A I have no idea. It's a government official.

21 Q So help me out here. If what I wanted to do
22 was have someone competent to do it look at the
23 underlying data to be sure that nobody missed anything
24 when it came to the compilation and preparing the
25 summaries, the only - and tell me if I'm wrong - the

1 person that I designate couldn't have hands-on access
2 unless the person I designate is whom?

3 A First, you couldn't have access because
4 you're not Danish.

5 Q Right.

6 A So you need a Dane.

7 Q Okay. There's nothing like a Dane.

8 A Yes.

9 Q So we've got to get someone who is Danish.
10 And is there a particular group of Danes that has
11 access to it?

12 A Yeah. The employees at the National Board
13 of Health and Welfare.

14 Q And are they able to share any of the
15 information that they get?

16 A If, if you have approvals.

17 Q Okay. And can they share the underlying
18 data? Could they give me a, for example, a run of all
19 six thousand people, in round numbers, that were in
20 your study and give me all of their, their individual
21 and respective ages and all their information about
22 their hospitalizations without their names?

23 A The data cannot leave the country.

24 Q I understand that. Whoever is going to do
25 this goes over there and --



1 A Umh-humh.

2 Q -- camps out at that place. If they wanted
3 to, could they --

4 A The people could give you that, yeah.

5 Q So that's something you could have had
6 access to?

7 A We did have access to it.

8 Q Okay. But as I understood it, you didn't,
9 you didn't personally oversee that data?

10 A Right. When I say we, I mean myself and the
11 colleagues on the paper.

12 Q And by the colleagues on the paper you mean
13 the Danish groups?

14 A Right.

15 Q Okay. Did they undertake any independent
16 verification or random sampling of the data summaries
17 to ascertain that the data summaries correctly
18 reflected the underlying data?

19 A Yeah, that's a good question. I know they
20 do go through a verification process. I'm not sure
21 exactly what that entails, but I know that's part of
22 their protocol.

23 Q Did you oversee that?

24 A I did not, no.

25 Q Aren't you the lead author on this?

1 A Absolutely, yeah.

2 Q Okay. So you don't know what the process
3 is, but you feel comfortable that there is a process?

4 A Umh-humh.

5 Q And that process, do you know whether or not
6 it was actually undertaken?

7 A Yes.

8 Q Who did it?

9 A I don't know.

10 Q So how do you know --

11 A My Danish colleagues did it.

12 Q How do you know that they did it?

13 A Because they're our collaborators and I
14 trust their word.

15 Q So they told you they did it?

16 A Umh-humh.

17 Q And how did they tell you they did it?

18 A Verbally.

19 Q No. I mean, what did they tell you they did
20 in order to do it? Did they explain to you the
21 process --

22 A No.

23 Q -- of verification?

24 A No, no.

25 Q So you don't know what they did?

1 A Right.

2 Q You just trust them?

3 A Absolutely, yeah.

4 Q So if I want to have somebody undertake that
5 same process, then I would retain a Dane?

6 A Umh-humh.

7 Q And --

8 A First you apply to the Board.

9 Q Well, the Dane would get the permission,
10 wouldn't he?

11 A Right. Well, maybe.

12 Q Okay. Well, the Dane applies -- well,
13 they've got a big problem over there, right? Isn't
14 that one of their big problems, they're worried about
15 all this data they've got and whether or not who can
16 access it and how they can access it?

17 A I don't understand.

18 Q Isn't that a concern of the Danish people,
19 that their public -- that their lives will become
20 public?

21 A I don't know.

22 Q You're not aware of the studies and the
23 articles written by the people in Denmark who are
24 worried about all these registries and the potential
25 for abuse?

1 A I, I -- personally I don't know.

2 Q Okay. So I get a Dane who's qualified and
3 competent, that person applies; if he gets or she gets
4 approval, then he or she can then go do whatever
5 verification process you understand and believe that
6 your colleagues did?

7 A Yes.

8 Q How long does that process take? I'm
9 talking about the approval process.

10 A Oh, I don't know. One to two -- one to
11 three months maybe.

12 Q What about the summaries, were you able to
13 take those with you?

14 A I took the tables with me that are in the
15 paper.

16 Q The three tables in the paper?

17 A Yeah.

18 Q But what about the summaries you used to put
19 the tables together?

20 A No. I didn't take those, no.

21 Q Okay. How much --

22 A I looked at those when I was in Denmark,
23 yeah.

24 Q Are they able to leave?

25 A I don't know. I believe not.

1 Q How much more extensive were the data that
2 you looked at as opposed to the data reflected in the
3 tables?

4 A The data that I looked at personally were
5 the data in the tables.

6 Q Okay. So --

7 A I didn't look at any other data besides what
8 was in the tables personally.

9 Q All right. So then as far as it goes -
10 again, tell me if I'm wrong - when I'm looking at your
11 Tables 1, 2 and 3 in the paper that has been provided,
12 I'm looking at the very same data that you looked at?

13 A Absolutely, yeah.

14 Q You saw nothing more than I saw?

15 A Right.

16 Q And from those data you constructed that
17 paper?

18 A Yes.

19 Q Do you know Doctor Goldman?

20 A No.

21 Q Do you know Doctor Tanner?

22 A No.

23 Q Do you know of any agreement between IEI or
24 you and the welding industry other than what is
25 reflected in the proposal that was drawn up between



1 IEI and the welding industry?

2 A No.

3 Q Well, other than being -- you being a
4 witness?

5 A Right.

6 Q And is any of that written down?

7 A No.

8 Q Are you familiar with something called the
9 Franklin Report?

10 A No.

11 Q The study that you did for the welding
12 people in the welding industry in -- what was it, in
13 2004 pretty much, right?

14 A Yes, yeah.

15 Q Were those data pretty much available in
16 1986? I mean, other than obviously the birth hadn't
17 been there until '86, but the same data available?

18 A I'm not sure when the data were available.

19 Q Well, if we look at Doctor Hansen's study,
20 which was '96 --

21 A Umh-humh.

22 Q -- does it indicate how long the data had
23 been available?

24 A I don't recall.

25 Q I think when we were off the record you

1 indicated that the Danish people have been keeping
2 records about everybody's health since -- when was it?

3 A Oh, not everyone's health. Everyone's
4 marriages and births.

5 Q Okay. When did they start the registries,
6 do you know?

7 A The registries for health?

8 Q Yes, sir.

9 A The hospitalization registry started in
10 1977.

11 Q Okay. So from -- in 1986, could there have
12 been basically about a ten-year study?

13 A On?

14 Q Hospitalizations.

15 A Yes.

16 Q Okay. And by 1990, roughly a fifteen-year
17 study?

18 A Umh-humh.

19 Q '95 -- or '97, a twenty-year study?

20 A Right.

21 Q Do you know of anybody that ever undertook
22 to do that?

23 A No.

24 Q Do you know why they didn't?

25 A No, I have no idea.

1 Q There were case reports in existence in '86,
2 were there not, of --

3 A I'm not sure of the dates of the reports.

4 Q If there were, would that be an indication
5 that such a study would have merit?

6 MR. SCHACHTMAN: Objection; incomplete
7 hypothetical.

8 A I'm not sure what the reports were.

9 Q If they showed that people who were exposed
10 to welding fumes were suffering from movement
11 disorders who were welders, would that indicate that
12 such a study would have --

13 MR. SCHACHTMAN: Objection to form.

14 Q -- purpose?

15 MR. SCHACHTMAN: Same objection.

16 A I don't believe that case reports always
17 justify a study.

18 MR. SCHACHTMAN: Want a take a lunch break?

19 MR. CROSBY: Yeah, why don't we do that. If
20 that suits everybody, we can break now and I can
21 organize.

22 THE VIDEOGRAPHER: We are going off the
23 video record. The time is 12:14 p.m.

24 (A luncheon recess was taken at 12:14 until
25 1:17 p.m.)

1 THE VIDEOGRAPHER: We are back on the video
2 record. The time is 1:17 p.m.

3 BY MR. CROSBY:

4 Q Doctor, did you have a good lunch?

5 A Yes.

6 Q Did you have an opportunity to -- or did you
7 take the opportunity to check on increased risk of
8 lung cancer from cigarette smoking during lunch?

9 A It didn't occur to me to check for that.

10 Q Okay. Let's go back to the --

11 MR. SCHACHTMAN: There was no smoking at
12 lunch.

13 Q Let's go back to the dream study that I
14 talked about earlier on.

15 A Umh-humh.

16 Q What would be your outline generally,
17 without just giving any numbers or anything, generally
18 what would be an ideal epidemiological study to
19 ascertain increased risk, if any, of -- to any disease
20 from any substance where the occurrence rate in the
21 general population is, say, two or three per hundred
22 thousand?

23 MR. SCHACHTMAN: Objection to the form. You
24 can answer.

25 A The ideal study for any disease is a



1 randomized controlled trial.

2 Q And how would you do that when it comes to
3 something like welding?

4 A You could randomly assign people exposure to
5 welding fumes or not, and follow them over time to see
6 if they develop Parkinson's disease.

7 Q I mean, that's using humans as guinea pigs.

8 A That's my dream study.

9 MR. SCHACHTMAN: Objection to form.

10 Q I see.

11 A If you really want to know the answer to the
12 question.

13 Q Aside from doing that, what is the way that
14 we could -- or you could ascertain whether or not
15 welding fumes increases the risk of Parkinson's
16 disease in welders or Parkinson's -- let's try to get
17 some terms straight.

18 A Okay.

19 Q I think we've been saying the same thing all
20 along, but I don't know. When I've been saying
21 Parkinson's disease, have you been restricting it in
22 your mind to just idiopathic Parkinson's disease, or
23 do you include the panoply of Parkinson's syndrome?

24 A In my mind it's only Parkinson's disease.

25 Q Okay. And what about Parkinsonism, what



1 does that mean to you?

2 A That's a different disease.

3 Q Okay. Would you do the study differently
4 for Parkinson's disease than Parkinsonism?

5 A No.

6 Q Okay. So would the questions that I've
7 asked that have just utilized the term Parkinson's
8 disease in your answers include Parkinsonism?

9 A I would study any disease, the best design
10 would be a randomized control trial.

11 Q In the Danish study were you studying
12 Parkinsonism, Parkinson's disease, or movement
13 disorder?

14 A If you look at Table 2 it tells you all the
15 diseases we looked at. The main focus was Parkinson's
16 disease.

17 Q Okay.

18 A But we look the at some other
19 neurodegenerative diseases.

20 Q So what would be your study for finding
21 whether or not there is an increased risk for
22 welding -- or, excuse me, for Parkinsonism or
23 neurological deficits for Parkinson's disease from
24 welding fumes?

25 A The next best state of design, if you

1 couldn't do a randomized controlled study, would be a
2 cohort study.

3 Q And how would you fashion that study?

4 A I'd identify a group of welders, ascertain
5 their exposure status, and then follow them over time,
6 see who developed Parkinson's disease. You can either
7 do it with only welders or you could use a similar
8 group of people not working in welding that have
9 similar characteristics.

10 Q If you just used a group of welders for your
11 cohort, would you call that a cohort?

12 A Yeah.

13 Q Would you compare it with anything?

14 A You could compare it with -- you know, if
15 you had industrial hygiene measures you could either
16 look at people who are higher exposed to lower exposed
17 based on however you had those exposure measurements.

18 Q Would you compare it to another population?

19 A You could do that if you had -- if you were
20 able to ascertain Parkinson's disease in a similar
21 manner in both populations, that would be fair.

22 Q Is there a way to do that in the United
23 States in any geographical area of which you are
24 familiar?

25 A I don't know.



1 Q Is that anything that you've explored?

2 A To do it in the U. S.?

3 Q Yes, sir.

4 A No.

5 Q Has anyone asked you to explore that?

6 A No.

7 Q You have a Swedish proposal?

8 A Yeah.

9 Q Was that -- well, whose idea was that?

10 A Doctor Blot's.

11 Q Is there a reason that he suggested doing
12 the Swedish proposal?

13 A I don't know his reasons for it.

14 Q Do you think it's a good idea?

15 A Sure.

16 Q Do you think it will provide helpful data in
17 assessing an increased risk or not of Parkinsonism or
18 movement disorders amongst welders?

19 A Yeah. It's always good to confirm your
20 hypothesis in other populations.

21 Q In your ideal or dream study, would you have
22 a control group?

23 A In my ideal study with unlimited resources,
24 yeah.

25 Q And how big would it be?



1 A It would depend on the rate of diseases in
2 the populations.

3 Q Assume, again, that it's approximately three
4 per hundred thousand per year.

5 A I can't do those calculations without
6 looking at the -- you know, a formula and having my
7 calculator. So that would be difficult for me to, to
8 do.

9 MR. SCHACHTMAN: Doctor Fryzek, can I ask
10 you to keep your voice up?

11 THE WITNESS: Okay.

12 BY MR. CROSBY:

13 Q Would you want the population to be the same
14 size as the exposed population?

15 A Again, it would depend on the rates of the
16 disease and other characteristics.

17 Q At what rate would you want it to be the
18 same size and at what rate would you not care if it
19 is?

20 A That's something I would have to calculate.

21 Q How would you ascertain exposure levels?

22 A Exposure levels to?

23 Q The welding fumes. I thought one of the
24 things was quantify the exposure over time.

25 A Yeah. One thing you could do is what we did

1 in our paper, is look at duration of welding, how many
2 years they, they worked as a welder. You would assume
3 that people who worked longer would have higher
4 exposure, cumulative exposure.

5 Q And did your study include anyone who ever
6 welded?

7 A It included people who welded, yeah. That
8 were welding in a company, employed as a welder,
9 absolutely.

10 Q For any period of time?

11 A I'm not sure of the minimum period of time
12 that they were employed as a welder.

13 Q Would that be of significance?

14 A Typically, if you want to look at, you know,
15 levels of exposure, you would need to know that
16 information.

17 Q And if you wanted to assess whether a given
18 population in a particular occupation was at an
19 increased risk for contracting a disease from exposure
20 in that occupation, wouldn't it also be important to
21 know for how long the person was exposed?

22 A Yeah.

23 Q So if someone is caught in a cohort as
24 having been classified as a welder at any one given
25 time, regardless of how long, if it happened to be a

1 very short period of time, that could have an impact
2 on the results, could it not?

3 A It may or may. It depends if there's an
4 association with the duration of exposure. But -- but
5 in our study we actually did that and found that
6 people who worked longest, twenty years or more, I
7 think it was twenty years or more, had no -- their
8 risk was not statistically significantly different
9 than people who worked a short period of time.

10 Q The risk of hospitalization?

11 A For Parkinson's disease.

12 Q Right. So what I'm trying to get to is if
13 you have, of a cohort of six thousand people --

14 A Umh-humh.

15 Q -- for ease, let's say one thousand of them
16 were only welders for a month --

17 A Umh-humh.

18 Q -- that one thousand people, if it's a time-
19 dose relationship, would greatly dilute the effect,
20 would they not?

21 A If that's the case. But that wasn't the
22 case in our study, that people who worked longest had
23 the greatest risk.

24 Q I understand you want to talk about your
25 study and you want to defend it.

1 A Yeah.

2 Q But I'm not talking about your study right
3 now.

4 A Okay.

5 Q Okay?

6 MR. SCHACHTMAN: Objection to form.

7 Q So normally speaking, if you have a
8 population of six thousand people and one thousand of
9 them were engaged in the occupation for a very brief
10 period of time but still classified in the cohort as
11 in the occupation, and if it's a time-dose response or
12 relationship, that would dilute the result, would it
13 not?

14 MR. SCHACHTMAN: Objection to form.

15 A I don't know.

16 Q It could --

17 A I'm speculating.

18 Q It could, though, couldn't it?

19 MR. SCHACHTMAN: Objection to form.

20 A It may.

21 Q What steps did you all take to verify the
22 duration that someone welded?

23 A It was ascertained from the questionnaire
24 data.

25 Q How would you do that in your study if you



1 were designing one?

2 A If it was a prospective study, which I
3 prefer to do, you would know when they first were
4 employed as a welder.

5 Q Okay. And if it was a retrospective study,
6 how would you go about ascertaining it?

7 A It depends on what type of information you
8 have.

9 Q You know they're a welder.

10 A You would have to have identified that
11 through some mechanism.

12 Q Yes, sir. And so how would you then
13 identify for how long each person was a welder?

14 A It would depend on the information that you
15 had about the person.

16 Q All you know is it's a human being that's a
17 welder.

18 A Umh-humh. If it was a yes/no, then you
19 wouldn't be able to do it.

20 Q How would you -- after you had the yes or
21 no, what steps would you take to find out?

22 A You're asking me to speculate, or --

23 Q Assume you had a database that gave you the
24 data on six thousand people that said they were
25 welders and you wanted to know how long they were

1 welders, how would you go about finding out?

2 A There's a number of ways you could it. You
3 could ask them.

4 Q Right.

5 A You could look at employment records.

6 Q Okay.

7 A You could look at tax records.

8 Q Okay. Was that done in Denmark?

9 A Yes.

10 Q What was done?

11 A We asked them and we looked at employment
12 records.

13 Q Okay. When did you ask them?

14 A I didn't ask them personally, our Danish
15 colleagues did.

16 Q I'm sorry. Who did?

17 A Danish colleagues.

18 Q When did they ask them?

19 A They had information in 1986.

20 Q Okay. So they used the questionnaire?

21 A Right.

22 Q Would you use a questionnaire?

23 A I, I would use whatever method I could.

24 Q Would a questionnaire be one of the methods?

25 A Yes, yeah.

1 Q All right.

2 A Sure.

3 Q Exhibit 1, I believe -- no, what is it?

4 A 3.

5 Q Exhibit 3?

6 A Yeah.

7 Q Is that the one you would use?

8 A For my dream study, or for --

9 Q Yes, sir.

10 A I would use a similar questionnaire.

11 Q You would. What all does that ask?

12 A Specifically, I don't know.

13 Q But you would use it?

14 A I, I would use it to get the similar type of
15 information.

16 Q But you don't know what information it
17 seeks, do you?

18 A I know that it tells you duration of
19 welding, how many years you worked as a welder, when
20 you started working as a welder.

21 Q That's what you understand from reading the
22 study?

23 A That's what I understand from my Danish
24 colleagues.

25 Q I see. So you -- a questionnaire in your

1 book is a valid way to follow up, just to follow up
2 and find out whether or not somebody was a welder and
3 for how long?

4 A It's one of the ways that you could do it.

5 Q Okay. Was that done when you undertook the
6 study that was published, or is to be published that
7 you were hired by the welding industry to do?

8 A Yeah, a questionnaire was used.

9 Q No. Did you use one?

10 A Myself personally?

11 Q Yes.

12 A I did not.

13 Q Did you or your colleagues that were
14 involved in writing the paper in the year 2004 use a
15 questionnaire?

16 A Yes, they did.

17 Q Which one?

18 A This one. Exhibit No. 3.

19 Q Was that provided to them?

20 A I'm sorry?

21 MR. SCHACHTMAN: Objection to form.

22 Q Were the answers to the questionnaires given
23 to them?

24 MR. SCHACHTMAN: Objection to form.

25 A I don't understand your question. I'm



1 sorry.

2 Q As I read the paper --

3 A Umh-humh.

4 Q -- you all did not resubmit questionnaires
5 to people, did you?

6 A We did not.

7 Q Okay. So did you and your colleagues use
8 questionnaires?

9 A Yes.

10 Q Where did you get them from?

11 A From the 1986 questionnaire.

12 Q So did you have copies of the 1986
13 questionnaires?

14 A Oh. Me -- no, I did not.

15 Q Did your colleagues?

16 A They did not have copies of the
17 questionnaires.

18 Q So how did you use them?

19 A They had the text files that were coded from
20 the questionnaires.

21 Q And where did they get those?

22 A They own that data.

23 Q Who is they that own that data?

24 A Our Danish colleagues.

25 Q What are their names?



1 A Doctor -- Doctor Bonde, I think B-O-N-D-E, I
2 think it's Jens Peter. The original data is owned by
3 Doctor Hansen who collected it.

4 Q Is that data available?

5 A In Denmark it is.

6 Q Does one have to go through the same process
7 to get that data?

8 A Absolutely, yeah.

9 Q So is it controlled by the Danish
10 government?

11 A It's controlled by the Danish Cancer
12 Institute.

13 Q And Mr. J-E-N-S Peter B-O-N-D-E --

14 A Yeah.

15 Q -- has that data?

16 A I believe so.

17 Q But do you know?

18 A I don't know for a fact.

19 Q Okay. Did you oversee anyone doing any work
20 with respect to those data?

21 A I discussed with our Danish colleagues the
22 analyses.

23 Q Did you oversee how anyone used that data?

24 A Yes.

25 Q Whom did you watch and what were they doing?



1 A I watched the statistician do the analysis.

2 Q How did they do it?

3 A On a computer.

4 Q Did you take any random sample at any time
5 of any of the work performed by statisticians to
6 ascertain that they were accurately doing their work?

7 A The data was replicated by one of our
8 biostatisticians as well. I mean, the data analysis.

9 Q Which one?

10 A Miss Cohen.

11 Q And Miss Cohen is an IEI person?

12 A Yes.

13 Q Did you oversee her work personally?

14 A As -- yes.

15 Q So you watched her do it?

16 A I didn't watch her do it.

17 Q Okay.

18 A But I saw the results of her work.

19 Q You saw her results?

20 A Yeah.

21 Q Did you see what steps she took to
22 replicate?

23 A No.

24 Q Do you know what steps the first group took
25 to generate their reports?



1 A No. In general I do, but the specific
2 steps, I don't know.

3 Q Why not?

4 A Because that was their duties, or that was
5 their job on the project.

6 Q Is Miss Cohen in a position to tell us
7 whether or not she looked -- did she look at the
8 underlying data?

9 A No.

10 Q So she did not have Doctor Hansen's
11 underlying data?

12 A No. We're -- the underlying -- by
13 underlying data I mean the hospitalization data,
14 that's the underlying Parkinson's's data.

15 Q Then let's use the underlying computerized
16 data from Doctor Hansen.

17 A Yes.

18 Q Did she have that?

19 A She looked at that when she was in
20 Copenhagen, yes.

21 Q Did she manipulate it, or just look at it?

22 A She manipulated it.

23 Q Okay. Did she manipulate it under anyone's
24 supervision?

25 A Pardon me?



1 Q Did she manipulate it while under anyone's
2 supervision?

3 A Under my supervision and Doctor Olsen's
4 supervision, yes.

5 Q What was the nature of your supervision?

6 A I discussed with her the type of analyses I
7 wanted to see from the data.

8 Q Okay. And did she provide the type of
9 analysis you wanted?

10 A She performed the statistical maneuvers that
11 I asked her to.

12 Q And did you do anything to verify that her
13 statistical maneuvers were done properly?

14 A I did not, but my Danish colleagues did as
15 well.

16 Q And who was your Danish colleague that did?

17 A Miss Bouts, Andrea Bouts.

18 Q How you did she go about doing it?

19 A She ran the statistical tests independently
20 of Miss Cohen and got the same results.

21 Q Using the same formulas?

22 A I'm not sure exactly what her programming
23 entailed.

24 Q Did any American have access to any of the
25 underlying hospitalization data?



1 A No.

2 Q What Danish people had access to the
3 underlying hospitalization data?

4 A The people at the National Board of Health
5 and Welfare. And I'm not a hundred percent sure but I
6 think that they gave summary data to the Cancer
7 Institute so that we could calculate rates.

8 Q In your dream study with respect to welding
9 rods, would you study different types of welding rods?

10 A If I believed that there was a health effect
11 associated with it, the welding rods.

12 Q Would you study different types of metals
13 that were being welded with different types of rods?

14 A Again, if I believed there were health
15 effects.

16 Q Were you of the opinion that mild steel and
17 stainless steel welding was the only welding that
18 potentially posed a health risk?

19 A I had no thoughts on what type of welding.

20 Q Was that Doctor Blot's call as to what
21 welding --

22 A We used all the data that was available to
23 us, and those were the data that were available to us,
24 mild and stainless steel welders.

25 Q Do you know what the diagnostic criteria for



1 the various disease categories in your Danish study
2 was utilized in Denmark during the times at --
3 understudied by you and your colleagues Parkinson's
4 disease?

5 A I don't, but the neurologist that treated
6 the patients did.

7 Q Okay. So let me back up.

8 Did you undertake any examination or
9 interview anybody to ascertain the diagnostic criteria
10 utilized by Danish physicians during the periods that
11 your cohort was followed by you in those records?

12 A I did not.

13 Q Okay. Is there a separate neurological
14 registry in Denmark?

15 A No.

16 Q Do you know whether or not everyone who gets
17 hospitalized in Denmark is seen by a neurologist?

18 A I don't know.

19 Q So am I correct in my understanding that of
20 your cohort of six thousand people, as far as we know
21 it may well be that none of them saw a neurologist?

22 A That's incorrect.

23 MR. SCHACHTMAN: Objection to form.

24 Q I'm sorry?

25 A That's incorrect.

1 Q And how do we know that that's incorrect?

2 A We verified the diagnosis of Parkinson's
3 disease, we discussed that in the paper, and in order
4 to verify it they went through medical records and
5 either had a neurologist write down Parkinson's
6 disease in the medical records and also medication to
7 treat Parkinson's disease.

8 Q So it's your understanding that your random
9 sample of -- was it eighty records?

10 A I can't recall the exact number.

11 Q Well, and you didn't do that, did you?

12 A Right.

13 Q That was the Danish colleagues --

14 A Right.

15 Q -- that did that?

16 Now, you're saying that they verified that a
17 neurologist had seen each of those patients at the
18 time of diagnosis?

19 A At the time of hospitalization.

20 Q At the time of hospitalization they verified
21 that each of those had been seen by a neurologist?

22 A That -- through the medical records, yes.

23 Q Okay. And then what, that was independently
24 assessed by a neurologist on your team to verify that
25 that diagnosis was accurate?



1 A No.

2 Q Who was it that undertook to verify the
3 accuracy or inaccuracy of the Parkinson's disease
4 diagnosis in the random sample?

5 A I'm not sure. It was someone under the
6 direction of Doctor Olsen, who was on the paper. I'm
7 sorry, Doctor Hansen, Johnni Hansen.

8 Q Is Johnni Hansen, J-O-H-N-N-I, related to
9 the Doctor Klaus Hansen?

10 A I have no idea.

11 Q How long did you all work together?

12 A I don't know who Doctor Klaus Hansen is.

13 Q You don't?

14 A No.

15 Q Okay. Did you work with Johnni Hansen?

16 A Yes.

17 Q And where is he from?

18 A Copenhagen.

19 MR. SCHACHTMAN: Hansen's a little bit like
20 Kim in Korea. Hansen in Denmark is a little bit like
21 Kim in Korea.

22 Q Do you know the ICD diagnostic criteria for
23 Parkinson's disease, or maganesism or Parkinsonism, or
24 any of the disease categories in your study?

25 MR. SCHACHTMAN: Objection to form; assumes



1 facts not in evidence.

2 A Could you repeat the question?

3 Q Do you know what the ICD codes are?

4 A I think we report them in the paper.

5 Q Right. But are you familiar with them?

6 A I can't tell you them from memory.

7 Q No. But are you familiar with them?

8 A I'm familiar in that we put them in the
9 paper.

10 Q Are you familiar with the diagnostic
11 criteria set forth by the ICD codes for Parkinson's
12 disease, for example?

13 MR. SCHACHTMAN: Objection; foundation.

14 A I'm sorry. I'm not sure what you're asking.

15 Q Your paper says that the patients were coded
16 as having Parkinson's disease based on ICD 8 through
17 10, I believe, correct?

18 A Yes.

19 Q Do you know what's contained in the ICD 8,
20 for example, with respect to a description of
21 Parkinson's disease?

22 MR. SCHACHTMAN: Objection; foundation.

23 A I, I can look in the ICD code book for 8, 9
24 and 10, and look up Parkinson's disease and determine
25 what the code is.



1 Q Okay. Everybody in this room could do that.

2 A Correct.

3 Q Okay. But do you know whether or not the
4 ICD code also has criteria for what someone should
5 manifest in the way of symptoms as to whether or not
6 they may fit under one particular ICD code in any of
7 those editions as opposed to under a different ICD
8 code?

9 A That I don't know.

10 MR. SCHACHTMAN: Objection to foundation.

11 A No.

12 Q Okay. Prior to you undertaking your role --
13 and yours was in January of 2004, right?

14 A Yeah.

15 Q -- were you aware of any epidemiological
16 studies that showed an increased incidence of
17 Parkinsonism or Parkinson's disease in people exposed
18 to welding fumes?

19 A Not prior to 2004.

20 Q Did you become aware of any between January
21 2004 and the publication of your article?

22 A Yes, through the ones I looked up on Pub
23 Med.

24 Q Do you recall which ones revealed that?

25 A I think I discussed them in my paper, so I



1 can't recall off the top of my head.

2 Q Do you make a distinction between -- what is
3 the distinction -- excuse me, I think you already told
4 me you did. What is the distinction you make between
5 Parkinsonism and Parkinson's disease?

6 A The only distinction I make is through the
7 ICD codes that we used to define our outcomes in the
8 paper.

9 Q All right. So did you have to, or did any
10 of the people involved in writing your paper have to
11 make any kind of independent assessment that someone
12 fit one or the other of the ICD codes other than the
13 random sample?

14 A Yeah. No one on the paper looked to see
15 if -- looked for the ICD criteria in the welders or in
16 the general population.

17 Q When it came to the random sample, who was
18 it of your colleagues that undertook to diagnose and
19 classify the ICD code that a patient would have based
20 on the review in the random sample of the medical
21 records?

22 A No one on my study did a diagnosis. It was
23 only a verification of the diagnosis.

24 Q Okay. So if I'm understanding what you just
25 said, the random sample was not undertaken to be sure



1 that someone was correctly diagnosed, the random
2 sample was undertaken to see if the record really said
3 Parkinson's disease?

4 A That there is a verification of Parkinson's
5 disease in the record, yes.

6 Q All right. Was it restricted to primary
7 diagnosis?

8 A For our study it was, yes.

9 Q Was it restricted to that for purposes of a
10 random sample?

11 A Yes.

12 Q Are you familiar with the reference
13 sample -- or, excuse me, the Reference Manual on
14 Scientific Evidence?

15 A No.

16 MR. CROSBY: Let me show you what we will --
17 or I will mark for us as Exhibit 4.

18 THE WITNESS: 4 is next.

19 (Deposition Exhibit No. 4 was marked for
20 identification and was attached to the transcript.)

21 BY MR. CROSBY:

22 Q Could you tell me what that is, please, sir?

23 A This appears to be a proposal for the
24 Swedish study.

25 Q Has that study been approved?



1 A It's going through that process right now.

2 Q So has it been approved?

3 A It's going -- I don't -- no, it has not been
4 approved. It's. . .

5 Q Did you help draft this proposal?

6 A No.

7 Q Who drafted the proposal?

8 A Doctor Blot.

9 Q When did he draft -- that proposal was July
10 20th, 2004?

11 A That's what it says, yeah.

12 Q Do you know to whom he presented it?

13 A No, I don't.

14 Q But you do know it's under consideration?

15 A Right.

16 Q Do you know if he's presented it to welding
17 manufacturers or NIH or --

18 A I'm sorry. By under some consideration, I
19 mean that the Swedes are going through the process to
20 get approval for the data.

21 Q All right. And do you know whether or not
22 you have -- it's been submitted by -- to anyone for
23 approval for funding?

24 A It's my understanding that it's been funded.

25 Q Okay. Who is funding it?



1 A The same group that's funded the Danish
2 study.

3 Q Who is that group?

4 A I can't recall what they title themselves,
5 consumables of welding products.

6 Q Combustibles?

7 A Yeah.

8 Q Do you all at IEI represent, or ever do any
9 work with labor unions?

10 A I don't know.

11 Q Have you?

12 A I have not, no.

13 Q Have you all ever undertook to explore risk
14 or causation of disease in a population of workers on
15 behalf of the workers?

16 A Yes.

17 Q Which ones?

18 A Boeing.

19 Q And what was the extent --

20 A I guess that was funded by the automotive
21 union.

22 Q Okay. And what was the name -- what was
23 that study involving?

24 A It's currently ongoing, of people who
25 developed rocket test engines.



1 Q And is it funded by them in whole or in
2 part?

3 A I think -- I'm not exactly clear who the
4 funding actually comes from, but I, I know they're
5 part of the -- I think they did fund part of it.

6 Q They either may be funding or they're
7 providing the cohort?

8 A No, they're not providing the cohort. The
9 cohort is all the employees of Boeing.

10 Q Okay. Is Boeing funding part of it?

11 A I believe so.

12 (Deposition Exhibit No. 5 was marked for
13 identification and was attached to the transcript.)

14 MR. CROSBY: Let me show you what I will
15 mark as No. 5. I don't know why some of these are
16 thicker than others.

17 MR. THOMPSON: This is 5?

18 MR. CROSBY: That's 5. I apologize to you
19 all for not having enough copies, but I didn't know
20 how many were going to be here, either.

21 BY MR. CROSBY:

22 Q Could you tell me what this is, please?

23 A It appears to be the proposal that -- for
24 the Danish study.

25 Q Have you seen it before?



1 A Yes.

2 Q When was the first time that you saw it?

3 A I think that -- when you asked us to produce
4 it.

5 Q Okay. So prior to undertaking the study in
6 January and throughout the time that the study was
7 being performed, you didn't look at this proposal?

8 A No. It was in Doctor Blot's office.

9 Q Okay. Was there a protocol for this study?

10 A Other than what's written in the proposal,
11 no. The proposal is the protocol.

12 Q So how did you know what to do?

13 A Actually, it pretty much lays out step by
14 step what we're going to do under the methods section.

15 Q Yes, sir. But I understood you didn't have
16 this until after the study was finished.

17 A Excuse me?

18 Q I understood that you did not have Exhibit 5
19 until after the study was finished.

20 A No. What this -- this is telling the
21 methodology used to assemble the cohort and to link it
22 to the registries and things like that. So that was
23 all done prior to my joining.

24 MR. SCHACHTMAN: Mr. Crosby's asking you
25 about your last answer in which you said you hadn't



1 seen this before you started.

2 THE WITNESS: Right.

3 MR. SCHACHTMAN: You only saw it recently.

4 Then he asked you how you did the study without
5 knowing this information, that's the question.

6 A Okay. This was for the, for the Danes to
7 follow, and they had completed the -- most of the
8 steps in here except for the analysis prior to my
9 joining the project.

10 BY MR. CROSBY:

11 Q All right. So can you walk me through the
12 process?

13 A Umh-humh.

14 Q At some point, I take it, either Doctor Blot
15 was approached or he had a vision of doing a study?

16 A Umh-humh.

17 Q And from there to the time that you got
18 involved, what took place?

19 A Approvals to use the Danish data, some data
20 processing, and by that I mean a reassembling of the
21 questionnaire data and getting -- collecting the data
22 or applying it and assembling the data for Parkinson's
23 disease and other neurological conditions, and then
24 creating the background rates.

25 Q Okay. Who did all of that?

1 A The Danes.

2 Q Was Doctor Blot involved in that?

3 A Other than the initial discussions, no.

4 Q Okay. Were you involved in that?

5 A No.

6 Q Have you undertaken any steps for
7 verification of what was done by the Danes up until
8 the time that you came onboard other than them telling
9 you that this is what we did and we did it right?

10 A I personally did not do that, no.

11 Q Okay. Did any American do that?

12 A No.

13 Q Do you know if there are any drafts of this
14 proposal?

15 A I, I have no idea. I have no knowledge at
16 all.

17 Q Do you have any real awareness of what's
18 contained in the proposal?

19 A I've read it through, yeah.

20 Q Okay. When was the first time you read it
21 through?

22 A I'm not sure. Probably -- within the last
23 six months.

24 Q Okay. So this proposal didn't have anything
25 to do with the way you did the study, did it?



1 A The study was -- used standard
2 epidemiological methods, and I was able to do that.

3 Q Right. So this proposal didn't have
4 anything to do with how you did the study?

5 MR. SCHACHTMAN: Objection to form.

6 Q This proposal didn't guide you in any way?

7 A Everything that is in this proposal was
8 done, yes.

9 Q That's not my question, Doctor. And I'm
10 sorry that I'm inartful.

11 Did you rely on this proposal in any way,
12 shape, or form in performing what you did with respect
13 to the Danish study for the welding manufacturers?

14 A I did not read this proposal and then do the
15 study.

16 Q Okay. So did you rely on it in any way,
17 shape, or form?

18 A I personally did not.

19 Q Okay. Did anybody at IEI involved in it, in
20 the study rely on this proposal in any way, shape, or
21 form other than Doctor Blot?

22 A I, I believe Doctor Blot did.

23 Q And is he the only one as far as you know?

24 A Yes.

25 Q I notice that in this proposal there is



1 mention of a number of Danish hospital discharge
2 registries and other registries that can be linked
3 together.

4 A Umh-humh.

5 Q Do you know whether or not any of that was
6 linked other than the discharge registry and the
7 discharge diagnosis? And, excuse me, there's one
8 other one, I think, the emergency outpatient registry.

9 A I'm sorry. I don't -- I don't see where
10 you're reading the other registries.

11 Q Let me just ask you this.

12 What registries, if any, are you familiar
13 with being linked or utilized in the study?

14 A The hospital discharge registry.

15 Q Yes.

16 A The mortality registry.

17 Q Umh-humh.

18 A And the immigration registry. And I think
19 that's all that I'm aware of.

20 Q Does the hospitalization registry include
21 emergency room or outpatient?

22 A Yes.

23 Q Okay. Would that include clinics?

24 A Yes, it would.

25 Q Does it mean that -- and I don't know how



1 Danes practice medicine?

2 A No.

3 Q But if I'm a Danish citizen and need to go
4 to see my doctor --

5 A Right.

6 Q -- who is a neurologist, and I go see my
7 neurologist doctor, is he captured in this system?

8 A Yes.

9 Q From day one, or from 1996?

10 A It depends --

11 MR. SCHACHTMAN: Objection to form.

12 THE WITNESS: I'm sorry.

13 A -- if you were hospitalized or not.

14 Q Assume I'm not hospitalized.

15 A Then it would be captured in 1996.

16 Q Okay. So any person whose visits to a
17 neurologist in Denmark prior to 1996 that did not
18 result in hospitalization is not captured?

19 A Right. In this registry, that's correct.

20 Q Now, post 1996, are you saying that anyone
21 who went to any doctor anywhere in Denmark for any
22 purpose other than plastic surgery is captured by this
23 system?

24 A Yes.

25 Q And as I understand it, the -- and by this



1 system, I mean the hospitalization system.

2 A Umh-humh.

3 Q And as I understand it, when someone goes in
4 there is a diagnoses and there are up to twenty
5 different diagnoses?

6 MR. SCHACHTMAN: Objection.

7 A There can be.

8 Q Up to twenty?

9 MR. SCHACHTMAN: Objection.

10 A That's my understanding.

11 Q Okay. Which one of the twenty did you all
12 use?

13 A We used the first diagnoses, because it's
14 impossible to calculate comparison rates if you try to
15 use all twenty diagnoses.

16 Q Okay. So is it the diagnosis at time of
17 presentation of the patient at the hospital or the
18 emergency room, or is it the primary diagnosis at the
19 time that the person is discharged, or do you know?

20 A I don't know.

21 Q All right. So if you'll look at No. -- Page
22 3, is a list of various diseases or conditions with
23 ICD codes. Was there any consideration given, or do
24 you know if there was any consideration given to using
25 IDC -- excuse me, ICD occupation codes?



1 MR. SCHACHTMAN: Objection to form;
2 foundation.

3 Q Or occupation disease codes?

4 A I'm --

5 MR. SCHACHTMAN: Same objection.

6 A I'm not aware of what those codes are.

7 Q Okay. And as I understand the way the data
8 were likely done, if someone had a diagnosis, any of
9 these diagnoses that carry any of these ICD numbers,
10 they were theoretically picked up by the
11 hospitalization registry system?

12 A If they had one of these diagnoses in the
13 hospital discharge registry, yes, we picked them up.

14 Q And that's done by just key punching -- or
15 key punching's a thing of the past.

16 A By --

17 Q By computerized manipulation?

18 A Yes.

19 Q Right under that it says: In addition to
20 the hospital discharge and outpatient registries, a
21 psychiatric registry has been in place since 1953.
22 Linkage to this registry will also be explored.

23 A Umh-humh.

24 Q Did you have any involvement in the
25 exploration of that?



1 A No.

2 Q Do you have any understanding as to whether
3 or not such a registry exists?

4 A I understand that that registry does exist,
5 yes.

6 Q Do you understand why it was determined not
7 to link?

8 A I, I don't have any knowledge at all on
9 that.

10 Q Did you all calculate SDRs?

11 A No.

12 Q The bottom paragraph on Page 3 --

13 A Oh, I'm sorry. We call them standardized
14 hospitalization rates. In here we're calling them
15 disease ratios. It's the same calculation.

16 Q Would it be performed in a similar manner to
17 an SMR for that type study?

18 A An SMR would deal with mortality.

19 Q Right.

20 A But it would be performed in a similar
21 manner, yeah.

22 Q And did you calculate to a ninety-five
23 percent confidence interval?

24 A Yes.

25 Q Did Doctor Blot go to Denmark?

1 A Doctor Blot has been to Denmark, yes.

2 Q Did he go for this?

3 A No.

4 Q Did you go to Denmark for this?

5 A Yes.

6 Q Did Ms. Lipwid -- did Miss Lipworth, or
7 Mr. Lipworth, Lauren Lipworth?

8 A Miss.

9 Q Miss?

10 A Doctor.

11 Q Doctor?

12 A Doctor, yes.

13 She did not, no. She was pregnant.

14 Q Did anyone with IEI other than you go to
15 Denmark?

16 A Yeah. Miss Cohen.

17 Q And how many times did you all go?

18 A We went once. For this specific study,
19 once.

20 Q Yes, sir. Do you know Jens P. Bonde's
21 maiden name?

22 A He's --

23 Q It's a her -- a him?

24 A A him, yeah.

25 Q I don't know -- these names baffle me, I'm

1 sorry. They probably think I've got a strange name
2 and they would. . .

3 MR. SCHACHTMAN: Crosby's not a Danish name?

4 MR. CROSBY: That's what I'm going to have
5 to look up.

6 MR. SCHACHTMAN: You could probably trace
7 the lineage back five or six centuries.

8 MR. CROSBY: Absolutely.

9 BY MR. CROSBY:

10 Q Do you know who made the decision not to
11 link to the psychiatric registry?

12 A No, I don't.

13 Q Do you know why it was decided not to?

14 A No.

15 Q Looking at Page 6, it has fixed cost at two
16 hundred and eighty-nine thousand, seven hundred
17 dollars.

18 A Umh-humh.

19 Q And I thought we added up the numbers this
20 morning and we were right at two hundred and eighty
21 thousand dollars.

22 A I don't recall now. I'll trust you.

23 Q Is there going to be a supplemental -- has
24 it gone up?

25 A No. My understanding was that -- maybe it

1 did -- when was the last bill submitted? I'm not
2 sure.

3 Q I think you have them (indicating). It's
4 Exhibit 1.

5 A You know, I don't know, because I'm not in
6 charge of submitting the bills, so -- let's see. It
7 looks like his last one was July, so I think there's
8 one more payment.

9 Q And it says here that there's a discounted
10 rate of three hundred and fifty dollars per hour for
11 Doctor Blot, two-fifty for you, and two-fifty for
12 Doctor Lipworth.

13 A Okay.

14 Q Do you have an understanding as to why that
15 was done?

16 A I have no idea.

17 Q And you discontinued your favorable rate?

18 A For?

19 Q For purposes of doing your testimony and
20 doing declarations and doing work for the litigation.

21 A I'm not in charge of billing, so I don't
22 know --

23 Q Okay.

24 A -- what the rates are.

25 Q I understood that you were charging four

1 hundred dollars an hour.

2 A Right.

3 Q Okay. Well, here it was two-fifty.

4 A This is a different activity.

5 Q Okay. So writing a report is two hundred --
6 writing a scientific paper is two hundred and fifty
7 dollars an hour and a declaration's four hundred an
8 hour?

9 A I have no idea.

10 Q And on that last page it says Danish Cancer
11 Society-slash -- is that Ar/hous?

12 A Ar/hoose.

13 Q Aarhus University --

14 A Yeah.

15 Q -- a hundred and forty-nine thousand
16 dollars?

17 A Yeah.

18 Q Is that being paid directly by you all, do
19 you know?

20 A I'm not in charge of billing. I don't know
21 how those bills are being processed.

22 (Deposition Exhibit No. 6 was marked for
23 identification and was attached to the transcript.)

24 BY MR. CROSBY:

25 Q I'll show you what I'll mark as Plaintiff's



1 Exhibit 6, which is entitled a Research Agreement.

2 Have you seen that previously?

3 A I'm sorry. What was the question?

4 Q My question to you is have you seen Exhibit
5 6 previously?

6 A No.

7 Q Were you aware that there was a written
8 agreement between IEI and the Institute of Cancer
9 Epidemiology/Danish Cancer Society?

10 A I assume there was.

11 Q Is the Danish Cancer Society like the
12 American Cancer Society, a private society?

13 A Absolutely.

14 Q I'm sorry?

15 A I think so.

16 Q Okay. So it's not like the National Cancer
17 Institute, this is like a private organization?

18 A No. It's -- I don't quite understand
19 exactly. It's affiliated with the government, but it
20 also has a not-for-profit section as well it funds
21 from. But I'm not -- I can't speak to exactly. . .

22 Q Well, is the director of the Danish Cancer
23 Society a governmental employee, or is he an employee
24 of the Cancer Society, or do you know?

25 A I don't know. I don't know.

1 Q And the Institute of Cancer and
2 Epidemiology, what that is? Is that a part --

3 A Yes.

4 Q -- of the Danish Cancer Institute?

5 A That's a part of it.

6 Q Do you know if that's the privately funded
7 part, or the publicly funded part?

8 A I think those distinctions are more at an
9 overall level. I mean, they all -- there's not a
10 private and a public funded part.

11 MR. SCHACHTMAN: It's a socialist country.

12 Q And Joseph K. McLaughlin is the President of
13 IEI?

14 A Yes.

15 Q What's Doctor Blot's title?

16 A CEO.

17 Q Was there a separate agreement with Aarhus,
18 or is that something that was undertaken with the
19 Danish Cancer Society?

20 A I have no idea.

21 Q Have you had a chance just to look this
22 over? And do you notice that according to this
23 agreement IEI is going to pay directly to the
24 Institute of Cancer Epidemiology/Danish Cancer
25 Society?

1 A Okay.

2 Q Do you know why that would be done?

3 A Why IEI is paying directly to the Danish
4 Cancer Society?

5 Q Yes, as opposed to the funders.

6 A Oh, I have no idea.

7 Q Looking at Section 3, Schedule and Payments.
8 Do you notice that IEI is to pay the Institute of
9 Cancer Epidemiology/Danish Cancer Society a hundred
10 and twenty-five thousand dollars for doing their work?

11 A I see that on Page 2, yeah.

12 Q Do you have an understanding as to what
13 happened, or where the other twenty-four thousand
14 dollars went that was designated to go to IEI and
15 Aarhus for performing their work as opposed to the
16 hundred and twenty-five thousand going to the Danish
17 Cancer Society?

18 A I have no idea.

19 Q Did the Danish Cancer Society undertake to
20 do the things that are set forth in this Research
21 Agreement?

22 A They signed the Research Agreement, yes.

23 Q I understand they signed it. But did they
24 do the work, or do you know?

25 A They did -- I haven't read this through, but

1 I assume that they've done the work mentioned in here.

2 Q Well, there's an Attachment A, the research
3 protocol. Is that the same research protocol that was
4 presented to the funders?

5 A It appears to be.

6 Q Do you notice that the diseases in the
7 proposal to the Cancer Society is less extensive than
8 the list of diseases in the proposal to the funders?

9 A Okay.

10 Q Do you understand why that was changed?

11 A No.

12 Q But otherwise is the proposal -- or the
13 research protocol, Attachment A on Exhibit 6, does it
14 set forth the information contained on Exhibit 5 for
15 the research proposal?

16 A It appears to be.

17 Q Does seeing the difference on Page -- of
18 Exhibit 6 and Exhibit 5 with respect to disease
19 classifications that were to be reviewed have any
20 impact on your views with respect to the study --

21 A No.

22 Q -- or the proposals?

23 A Not at all.

24 Q Why is that?

25 A The study's what it is. We looked at the



1 diseases that are mentioned in the study.

2 Q But do you have any idea as to why some of
3 them were taken out?

4 MR. SCHACHTMAN: Objection to form.

5 A I, I have no idea.

6 Q If more diseases were included, could it
7 change your results?

8 A I think --

9 MR. SCHACHTMAN: Objection to form.

10 A -- we included more diseases in the paper.

11 Q Have you seen any documentation reflecting
12 any changes or modifications to the protocol and
13 proposal between IEI and the Danish Cancer Society?

14 A No.

15 Q Now, after you got onboard in January of
16 '04, right?

17 A Umh-humh.

18 Q How long was it before you went to Denmark?

19 A I think I went to Denmark in January and
20 then in March.

21 Q Okay. And what did you do before you went
22 to Denmark with respect to preparation for working on
23 this project?

24 A I read through the background literature.

25 Q And is that all reflected in the article?

1 A Yeah.

2 Q Did you form any opinions?

3 A I wanted to see what the research questions
4 were. And so, yeah.

5 Q Okay. And what were the research questions?

6 A To see if there were any health effects of
7 working in welding.

8 Q All right. And did you have a preliminary
9 view as to what -- whether or not there were health
10 effects --

11 A Not at all.

12 Q -- from working in welding?

13 A No.

14 Q So to you, based on what you read prior to
15 January of 2004, or up until the time you left for
16 Denmark sometime in January 2004, it was an unanswered
17 question?

18 A Correct.

19 Q Had you seen any studies that had indicated
20 there was no effect?

21 A I had looked at all the studies mentioned in
22 my paper. I think some had an effect and some did
23 not.

24 Q So another study is certainly called for
25 under those circumstances?

1 MR. SCHACHTMAN: Objection to form.

2 Q Do you agree?

3 MR. SCHACHTMAN: Objection.

4 A I mean, I would like to do as many studies
5 as I could, of course.

6 Q Well, did you think the question had been
7 answered?

8 MR. SCHACHTMAN: Objection to form.

9 A I, I think that the question has been
10 answered that there is no excess risk of
11 hospitalization for Parkinson's disease in Danish
12 welders.

13 Q I understand that. But did you think that
14 in January of 2004, that the question as to whether or
15 not there was an increased risk for Parkinson's
16 disease or movement disorders as a result of exposure
17 to welding fumes had been answered?

18 A No.

19 Q After you went -- what did you do when you
20 were in Denmark in January?

21 A I go to Denmark every two months.

22 Q Why do you go every two months?

23 A I have a variety of projects that I'm
24 involved in.

25 Q So in January of 2004 -- I wasn't talking

1 about this January. I said January of 2000 --

2 A I said this January as well.

3 Q Do you have relatives there?

4 A I, I do, but not -- none that are known to
5 me.

6 Q We may have something in common.

7 Let me ask you, then, in January of 2004,

8 when you went over --

9 MR. SCHACHTMAN: You could be related.

10 Q -- for this study --

11 MR. CROSBY: Maybe.

12 Q When you went over for this study in January
13 of 2004, what did you do on this study during that
14 visit?

15 A I had meetings with the other researchers,
16 our Danish colleagues, to see the progress of
17 assembling -- the data assembly for both the
18 questionnaire and the hospitalization rates.

19 Q And did you ask them about whether or not
20 there were other registries that you would -- that
21 they would recommend that you might access with
22 respect to this population?

23 A I didn't ask them, no.

24 Q Did you pick the cohort?

25 A No. The cohort was picked -- it was an

1 established cohort from 1986.

2 Q Well, I understand that. There are lots of
3 established cohorts out there, right?

4 A Right.

5 Q Who picked it?

6 A I assume the Danes did. We weren't aware of
7 the cohort prior to, prior to then.

8 Q Well, Doctor -- did Doctor Blot have it in
9 his proposal?

10 A Yes.

11 Q So did he get it from the Danes?

12 A I, I assume so. I'm not sure.

13 Q So then do you know who picked it?

14 A I don't.

15 Q Did you review any tables or data in your
16 January '04 visit?

17 A There were no tables or data to review.

18 Q In January of '04?

19 A Right, right.

20 Q Was there anything in writing for you to
21 review?

22 A No.

23 Q Was there anything on a computer screen for
24 you to review?

25 A No.

1 Q Was there anything in any form, including
2 hologram, for you to review?

3 A No.

4 Q So what, did you all just talk?

5 A Absolutely.

6 Q Did they have suggestions about how to make
7 the study better?

8 A No. The talk was in terms of timelines and
9 what needed to be -- what, what -- how far along they
10 were in assembling the data and getting it ready for
11 analysis. So it was more procedure issues and
12 practical issues.

13 Q Did you have any telephone calls from
14 anybody with the welding industry asking you about the
15 status and the progress and timelines as you were
16 working on this study?

17 A No. I didn't meet anyone from any of the
18 lawyers until after the study was completed.

19 Q Right. But did any of them call you up?

20 A No, no. I had no contact at all.

21 Q Who would they have been in touch with?

22 A I have no idea.

23 Q Well, was Doctor Blot the primary contact
24 for this study with respect to the client?

25 A Yes, he was. As he is for all of our

1 clients, I think.

2 (Comments off the record.)

3 MR. THOMPSON: Doctor Fryzek, if you could
4 keep your voice up a little bit.

5 MR. SCHACHTMAN: In order to keep it a
6 little cooler in here, I turned the thermostat down
7 and so now the HVAC is pumping cold air and it's got
8 that noise to deal with.

9 MR. CROSBY: Do you need any fresh water, or
10 are you all right?

11 THE WITNESS: I'm fine.

12 BY MR. CROSBY:

13 Q Okay. After you left Denmark -- have we
14 covered what you did in Denmark in January of '04?

15 A Yeah.

16 Q When was the next time that you had any
17 information on this particular study?

18 A The -- when the Danes had assembled the data
19 they called me and said it was ready to start working
20 on the analysis, so then I went.

21 Q And when was that?

22 A March.

23 Q And who was it that called you?

24 A Johnni Hansen.

25 Q And did he give you any preliminary

1 indication as to what the data were showing?

2 A No. He hadn't even looked at the data yet.

3 Q So you went back over in March of '04?

4 A Yeah.

5 Q What did you do when you were there in March
6 of '04?

7 A I worked on a variety of projects for this
8 project. I set up the, what you call dummy tables.
9 It's kind of the Table 1, look at the characteristics
10 and type of analyses that you want to see.

11 Q Did you see any data in March of '04?

12 A At the conclusion of my trip, I did. And in
13 terms of data, I meant the summary data that are in
14 the table.

15 Q So in March of '04 you were able to get the
16 information that's reflected on Tables 1, 2 and 3?

17 A Yes, yeah. We completed those analysis
18 during that time.

19 Q So you all were crunching numbers?

20 A That's exactly true.

21 Q But somebody else really was doing the
22 numbers crunching, you were getting the results?

23 A Yeah.

24 Q Did you provide any formulas or any
25 information as to how they needed to crunch the

1 numbers, or is that all programmed and it just sort of
2 gets crunched?

3 A That's standardized techniques, yeah.

4 Q Which ones did you all use?

5 A Pardon me?

6 Q Which standardized techniques did you use?

7 A The standardized techniques for cohort
8 studies described in Breslow & Day.

9 Q And are there programs that run those?

10 A Yes.

11 Q And which programs did you use?

12 A It's a computerized analysis system that's
13 called SAS.

14 Q And is there a particular program within SAS
15 that was used, or do you know?

16 A I don't know.

17 Q Do you know which edition or version?

18 A No. Whatever the dates have on their
19 computers.

20 Q Did anybody do any sampling or checking of
21 that, the system or the programs to make sure that
22 they were properly and validly operated?

23 A Yeah. We replicated all the analysis
24 independently. The Danes did the analysis and we did
25 the analysis as well.

1 Q Using the same computers?

2 A Not the same computers. The same
3 statistical software.

4 Q Okay. Was it their computers?

5 A Yes.

6 Q On their system?

7 A Yes.

8 Q So you used their data, their software and
9 their hardware?

10 A Yes.

11 Q After March of 2004, what did you do on the
12 study?

13 A I worked on the paper, writing the paper.

14 Q When did you do your first draft?

15 A Actually, I had a first draft done by the
16 end of March.

17 Q And what did you do with it?

18 A I distributed it to the coauthors.

19 Q All of them?

20 A Yes.

21 Q Did they give you comments back?

22 A They gave me comments back, yes.

23 Q How did they give you comments back?

24 A They faxed. They wrote on the paper and
25 faxed it back to me.

1 Q Nobody just emailed it to you?

2 A No.

3 Q You didn't use like Adobe Comment?

4 A I don't know what that is.

5 Q Or Word?

6 A No. They faxed.

7 Q Okay. Do you have those?

8 A No.

9 Q Did you do another draft?

10 A Yes.

11 Q And where is that?

12 A That draft was sent out to the colleagues as
13 well.

14 Q Okay. Did you get comments back?

15 A Yes.

16 Q Do you have any of those?

17 A No.

18 Q The first set of comments from your
19 colleagues, do you recall what the nature of the
20 comments were?

21 A It was more in the structure of the paper,
22 not really the substance of the paper.

23 Q And what was it that they wanted to modify
24 about the structure?

25 A They put in the -- they had done the



1 verification analysis, the verification of Parkinson's
2 disease, and so they added that in. Doctor Bonde had
3 some information on exposure levels of welders, and he
4 put that in as well. You'll find both of those in the
5 discussion.

6 Q Doctor Bonde's welding exposure levels that
7 he had, that's not the same population of people, is
8 it?

9 A I have no idea.

10 Q So we don't know that his exposure level has
11 any relevance to your findings?

12 A That I don't know.

13 Q And then the hospitalization, that's the
14 random sampling?

15 A Yes.

16 Q That was on the first go-round?

17 A I'm sorry?

18 Q That was on the first go-round of comments
19 by co-authors?

20 A I think so.

21 Q Okay. On the second -- when did you have
22 the second draft ready?

23 A Probably the end of summer. The problem was
24 we had -- the second go-round we sent out around May,
25 and then in Denmark they had this wonderful system



1 where they go on holiday for the summer. So when
2 people returned from holiday, we got the rest of the
3 comments back.

4 Q All right. Did anybody suggest that there
5 be some power calculations?

6 A That's not typically done, to my knowledge,
7 after a study's been completed.

8 Q I understand. But did anybody suggest it?

9 A No.

10 Q Did you, or did anyone before the study
11 began in January suggest that there be some sort of
12 power calculation with respect to the study?

13 A It was an impossible thing to do because we
14 didn't have the background rates of Parkinson's
15 disease in the population of Denmark.

16 Q Do you know of any European countries for
17 which there has -- there is such data?

18 A I don't know.

19 Q Or are such data?

20 A I don't know.

21 Q What were the comments on the second round?

22 A I'm trying to recall. I think they were
23 more just grammatical and, and just some minor wording
24 changes. I can't recall exactly what they were.

25 Q And those comments are gone?

1 A Yeah.

2 Q Did anybody ever do anything about arriving
3 at a P factor with respect to this study?

4 MR. SCHACHTMAN: Objection to form.

5 A I'm not sure what a P factor is.

6 Q As in like P greater than zero-point-oh-
7 five.

8 MR. SCHACHTMAN: A P value?

9 Q P value, P factor. I'm sorry.

10 A We -- I'm not sure what you're asking. I'm
11 sorry.

12 Q Is there one for this study?

13 A Every number in the table has a P value
14 associated with it. That's, that's included -- that's
15 in the confidence interval of the measurements.

16 Q Is that your range?

17 A Pardon me?

18 Q Is that the range?

19 MR. SCHACHTMAN: Objection to form.

20 A The range of?

21 Q Your CI.

22 A Right.

23 Q Can one ascertain a P value from that?

24 A One can look at a level of significance from
25 the confidence level.

1 Q Can one ascertain a P value for that?

2 A You can determine if P is less than or
3 greater than point-zero-five, yes.

4 Q Did anybody do that?

5 A It is understood.

6 Q What is understood?

7 A The significance level.

8 Q What is it? That it's less than zero-point-
9 five --

10 A It depends --

11 Q Or, excuse me, zero-point-zero-five?

12 A It depends what the levels of confidence
13 interval are.

14 MR. CROSBY: Okay. Let's look at what I'll
15 mark as Plaintiff's 7.

16 (Deposition Exhibit No. 7 was marked for
17 identification and was attached to the transcript.)

18 BY MR. CROSBY:

19 Q What is a -- yeah, I gave you the right one.
20 What is a P value?

21 A P value is a probability level.

22 Q And a probability level indicating what?

23 A If, if an association that you find in a
24 study is due to chance or not.

25 Q Is a P value something that one takes into

1 account when doing a study and ascertaining whether or
2 not there is a chance to replicate the study and that
3 something will happen just by chance?

4 A Not if you're a graduate of University of
5 Michigan. We believe in confidence intervals, not P
6 values.

7 Q Does anybody believe in P values?

8 A It's, it's not often reported. Confidence
9 interval is a much better measure. It gives you an
10 idea of, of chance, or P value, as well as the range
11 of a possible effect.

12 Q Did you all provide a P value for this study
13 at any point?

14 A Every measure of association has a P value
15 associated with it, yeah.

16 Q Did you ever type in the paper anywhere a P
17 value?

18 A Yeah. On Page -- on Table 3, there's the P
19 values. You're going to see P value equals.

20 Q Okay. Is this P equals zero-point-zero-
21 seven?

22 A You'll have to show me.

23 (Mr. Crosby exhibiting.)

24 A Yes. P equals zero-point-zero-seven, yes.

25 Q Is that a P value for the tailed study, the

1 one-tailed study? You've got -- it's the last page
2 on --

3 A That is the P value for the one-tailed
4 categorical trend.

5 MR. SCHACHTMAN: I'm sorry. Mr. Crosby,
6 which table are you on?

7 MR. CROSBY: Page 25 --

8 THE WITNESS: Page 25.

9 MR. CROSBY: -- which is Table 3.

10 BY MR. CROSBY:

11 Q Is there a P value for any other aspect of
12 the study?

13 A Again, the confidence intervals have
14 incorporated the value of, of chance in the measure.

15 Q Yes, sir. But do you provide a P value for
16 any of the other data, other than by means of
17 confidence value -- confidence interval?

18 A No.

19 Q Now, then, what is Fast Track publication?

20 A They publish interesting articles quicker.

21 Q And would it generally be an article that
22 deals with public health and safety?

23 A It's, it's the editor's discretion.

24 Q What was the date of your original
25 submission for this publication?

1 A I'm not sure of the exact date. It was
2 September something. It maybe was the end of August.
3 It was somewhere around there.

4 Q Of '04?

5 A Yeah.

6 Q Looking at Plaintiff's 7, this is a letter
7 to Paul Brandt-Rauf, I guess. I don't know.

8 A Right.

9 Q I don't want to mess his name up. He's just
10 right down the street in Towson, Maryland.

11 A Actually, he's in New York, I think. This
12 is his editorial assistant who is in Towson.

13 Q Okay.

14 A Yeah.

15 Q But it's addressed to him there?

16 A Right. That's, that's the address of the
17 journal.

18 Q Did you ask for Fast Track publication of
19 this?

20 A Yes.

21 Q Whose idea was it that you ask for Fast
22 Track publication?

23 A I think it was mine.

24 Q Did you run that by Doctor Blot?

25 A Yes, of course. Yeah, Doctor --

1 Q Did he -- I'm sorry.

2 A Yes.

3 Q Another point. If I interrupt you, I don't
4 mean to and let me know, because I want you to finish
5 your answer. Okay?

6 A Umh-humh.

7 Q Do you know whether or not the funders
8 wanted this fast-tracked?

9 A I don't know.

10 Q What's the date that this was submitted?

11 A I'm not sure. It was in the fall.

12 Q Okay. But Plaintiff's Exhibit 7, the letter
13 transmitting it, has no date, or am I missing it?

14 A Yeah, I don't see a date as well.

15 Q This statement here, quote, it is -- this is
16 the next-to-the-last sentence in the first paragraph:
17 It is estimated that there are over five hundred
18 thousand welders in the United States, so that
19 evaluation of possible adverse effects from manganese
20 or other exposures among welders seems critical.

21 A Yes.

22 Q Are those your words?

23 A Yes.

24 Q Would that have been true ten years ago?

25 A I don't know.

1 Q Twenty years ago?

2 A I don't know.

3 Q Then your next is: However, to date there
4 are limited scientific data addressing this important
5 health issue. Are those your words?

6 A Yes.

7 Q And do you estimate that there are over five
8 hundred thousand welders in the U. S. alone?

9 A Actually, Science Magazine does.

10 Q Okay. And you don't have the version that
11 prompted the comments that follow on the next page of
12 Exhibit 7; am I correct?

13 A I don't believe I do, no.

14 MR. CROSBY: Okay. Do you want to change
15 now?

16 THE VIDEOGRAPHER: Sure.

17 MR. CROSBY: Okay.

18 MR. SCHACHTMAN: Five-minute stretch, or --

19 MR. CROSBY: He just gave me a note that he
20 needs to change the tape.

21 THE VIDEOGRAPHER: Here ends Tape No. 2 in
22 the deposition of John P. Fryzek, Ph.D. We are going
23 off the record. The time is 2:42 p.m.

24 (A short recess was taken.)

25 THE VIDEOGRAPHER: Here begins Tape No. 3 in

1 the deposition of John P. Fryzek, Ph.D. We are back
2 on the record. The time is 2:56 p.m.

3 BY MR. CROSBY:

4 Q Could you tell us what Plaintiff's Exhibit 7
5 is, please?

6 A I'm sorry?

7 Q Could you tell us what Plaintiff's Exhibit 7
8 is, please?

9 A If I could have it.

10 Q I thought I gave it to you.

11 A I'm sorry. We were using it over here.

12 This is the letter we wrote to the editor of
13 the journal where we submitted our paper, as well as
14 the reviewer comments to our paper and our responses
15 to those comments, and then the final version of the
16 paper.

17 Q Do you agree that generally papers can have
18 strengths and weaknesses?

19 A Yes.

20 Q Do weaknesses in a paper generally bias to
21 the null?

22 MR. SCHACHTMAN: Objection to form.

23 A I have no idea.

24 Q You don't have any opinion one way or the
25 other as to whether or not whenever there's a weak

1 aspect of a paper, whether or not that tends to create
2 a bias toward the null? Not an intended bias.

3 A Umh-humh.

4 Q It just tends to drift it down to no risk as
5 opposed to drift it up to a risk.

6 A A weakness could push it in either
7 direction, a bias towards or away from the null.

8 Q With respect to Page 2 of Exhibit 7 --

9 A Okay.

10 Q -- the comment is: What about other types
11 of welding besides mild and stainless steel?

12 A Okay. You're looking at No. 1.

13 Q No. 1, yes, sir.

14 A Okay.

15 Q Who wrote these responses?

16 A I did.

17 Q Did you delegate any portion of responding
18 to this paper to anybody else?

19 A No.

20 Q Did anybody assist you with responding to
21 this paper?

22 A Doctor -- I'm sure Doctor Blot commented on
23 my responses.

24 Q So you would have made your responses,
25 submitted them to Doctor Blot, he may have had

1 comments, and you would have gotten those back and
2 incorporated them into whatever you sent in?

3 A Right.

4 Q Do you recall whether or not he did that?

5 A I don't recall his exact comments, but I'm
6 sure he did that.

7 Q And your response is: Information on other
8 types of welders was not available as this study was
9 based on a previous cohort study of mild and stainless
10 steel welders. Is that a limitation of the study?

11 A No, I don't believe so.

12 Q Did one of your peers indicate that it was?

13 A I don't -- no.

14 Q You don't know, or you disagree that --

15 A I disagree that he says that.

16 Q Did he suggest that you consider looking at
17 other types of welding?

18 A Yes.

19 Q And did you explain that the reason you're
20 not is because your cohort was picked?

21 A I'm explaining that the reason was -- that
22 we did not was because they were not available in the
23 cohort that we studied.

24 Q Right. It was not that it was not necessary
25 to do, it was that you could not given the parameters

1 of your cohort?

2 A Correct, yes.

3 Q So is that a weakness, that you could not do
4 the study that this reviewer was indicating he thought
5 you should explore?

6 MR. SCHACHTMAN: Objection; foundation.

7 A Yeah, that's not a weakness, no.

8 Q Okay. Did you have any weaknesses in that
9 study?

10 A Yeah, I believe we did.

11 Q In Paragraph -- excuse me, Methods, No. 1:
12 There needs to be a reference with respect to this --
13 a statement because prior studies have shown. And the
14 response was: We included a reference from a review
15 article. Do you know which article that was?

16 A If you'll allow me to look at paper, I'll
17 tell you.

18 Q Oh, yeah. Like I said, this is open-book.

19 A Okay.

20 (Witness reviewing document.)

21 A It looks like it's Reference 25 of the
22 paper, and if you look at the reference list, it's --
23 the author is Quick.

24 Q And that is dealing with smoking, nicotine,
25 and Parkinson's disease?

1 A Yes.

2 Q And No. 2 question is -- do you know who any
3 of the reviewers were, by the way?

4 A No. It's blinded.

5 Q Are any people at IEI on this journal?

6 A I am.

7 Q Do you know the peers?

8 A Pardon me?

9 Q Do you know the people that review it?

10 A Reviewed -- no, no.

11 Q Not this particular one, but in general do
12 you know who is on the committee? Do you all call it
13 a review committee?

14 A No. Typically what they do is they find
15 people who are expertise in some field and then ask
16 them to review. So there's not a committee that they
17 oversee.

18 Q It's not a set group that makes up those who
19 get sent papers on a rotational basis at random?

20 A I'm not -- all journals do it differently.
21 I'm not sure.

22 Q Okay. And No. 2 says: I'm concerned about
23 the statistical analysis of each effect, age, time,
24 duration, smoking, is analyzed separately.

25 MR. SCHACHTMAN: Excuse me. It says "since

1 each effect."

2 MR. CROSBY: Yes, thank you.

3 Q I would be surprised if each one of those
4 was independent from the other, especially age and
5 smoking. Was there any effect to -- effort to combine
6 the effects and interactions into one model so that
7 each effect is adjusted for the others? And the
8 response was -- what did you say in the response, can
9 you tell us?

10 A Due to the small number of cases of PD in
11 each category, simultaneous adjustment for any
12 evaluations of interactions between age, time,
13 duration and smoking was problematic, with limited
14 power interpretation of such models. No changes made.
15 And the editor agreed with us and accepted that
16 comment.

17 Q I understand. If the paper's published,
18 that means they accepted it?

19 A Absolutely.

20 Q They may not like it, but they accepted it,
21 right?

22 MR. SCHACHTMAN: Objection; foundation.

23 A I don't know.

24 Q You don't know?

25 A Yeah.

1 Q So let me ask you this. Was that a
2 weakness, the small number?

3 A I don't know if I would call it a weakness.
4 It was a limitation.

5 Q A limitation?

6 A Yeah.

7 Q Do limitations bias toward the null?

8 A Not to my knowledge.

9 Q Generally, is that an accepted premise in
10 epidemiology, that limitations in a study bias toward
11 the null?

12 MR. SCHACHTMAN: Objection to foundation.

13 A Not to my knowledge, no.

14 Q Now, when it says with limited power, what
15 do you mean by that?

16 A That the number of Parkinson's disease in
17 each category was small.

18 Q So is that different from a power
19 calculation?

20 A It's -- yes.

21 Q Did you undertake a power calculation post
22 study to determine how limited the power was, or is?

23 A No.

24 Q Is there a reason not to?

25 A Yeah. You can look at the range of the

1 confidence intervals see how -- confidence intervals
2 in the estimates.

3 Q Then the part under Results, where it says
4 No. 1, Page 9.

5 A Umh-humh.

6 Q Quote: Sixty-nine of the cases, ellipsis,
7 closed quote, I would like to see the results from the
8 last sentence, age at onset, put into either a new
9 table or one of the existing tables.

10 A Umh-humh.

11 Q Paren, Table 2, question mark, paren closed.
12 In the text I would also be interested in seeing the
13 exact, quote, P value, closed quote, rather than,
14 paren, P is greater than zero-point-one-zero, closed
15 paren, period.

16 A Umh-humh.

17 Q Is that what the reviewer wrote?

18 A Yes.

19 Q So was there a P value in this paper when it
20 was submitted at this point?

21 A Yes, it appears so.

22 Q Did you calculate it?

23 A I did not calculate it personally, no.

24 Q Do you know who did?

25 A Probably Miss Cohen.

1 Q Okay. Did you agree with it?

2 A With?

3 Q Her P value.

4 A I accepted her P value.

5 Q Did you do anything to check it?

6 A No.

7 Q So the P value is greater than zero-point-
8 one-zero?

9 A That's what it says, yes.

10 Q And is that in the paper?

11 A In the current paper?

12 Q Yes.

13 A No.

14 Q Did you take it out?

15 A Yes. The reviewer asked us to.

16 Q Well, actually, what -- does it say in the
17 text: I would also be interested in seeing the exact
18 P value?

19 A Umh-humh.

20 Q And that's in quote, right?

21 A Yes.

22 Q Rather than P is greater than zero-point-
23 one-zero?

24 A Yeah. We actually offered him more
25 information than that by providing the confidence

1 interval around the ages. So we did more than we were
2 asked.

3 Q In your opinion?

4 MR. SCHACHTMAN: Objection.

5 Q For those of us who like to see P values --

6 A Right.

7 Q -- it would be nice to see one, wouldn't it?

8 MR. SCHACHTMAN: Objection; foundation.

9 Q I understand you may not think it's any
10 good, but there are just some of us that like them,
11 we're old fashioned. Is there a reason that you
12 wouldn't?

13 A Because providing the confidence interval
14 offers more information than a P value.

15 Q Is a P value of greater than zero-point-one
16 of any significance as opposed to a P value of zero-
17 point-oh-five?

18 MR. SCHACHTMAN: Objection; competence.

19 A I'm not sure what you're asking.

20 Q What is the goal for a P value when someone
21 is performing a study?

22 A The goal for the P value is to determine if
23 your association may be due to chance or not.

24 Q And do you want your P value low, or high?

25 A It depends what you're looking at. I mean,

1 it depends on the study. It is what it is.

2 Q Does it give you any clue as to how strong
3 the study is or how much the chance is that this could
4 be a chance finding as opposed to a repeatable
5 finding?

6 A Not as much as the confidence interval.

7 Q I understand that. But does it give you
8 one?

9 A It gives you an idea, yes.

10 Q And what's the idea that it gives you when
11 it's greater than point-one-zero?

12 A There's no difference, no association.

13 Q Does it indicate that you have a higher
14 chance of this occurring by chance, if it's at, say,
15 zero-point-one-zero as opposed to zero-point-oh-five?

16 MR. SCHACHTMAN: Objection.

17 A I'm sorry. Could you repeat?

18 MR. CROSBY: Could you read that back,
19 please.

20 (Question was read by the Reporter.)

21 MR. SCHACHTMAN: Same objection.

22 A Both of those P values would say that
23 there's a high likelihood of it occurring by chance.

24 BY MR. CROSBY:

25 Q How high is the likelihood with a P value of

1 zero-point-one-zero?

2 A Zero-point-one-zero, it's ninety percent.

3 Q Ninety percent likelihood that it could just
4 be by chance?

5 A Yeah.

6 Q And if it's, say, zero-point-zero-five?

7 A Greater than zero-point-zero-five?

8 Q Right, if it's greater than. Is it still
9 the same thing?

10 A Yeah. It means that it's likely that
11 you're -- that it's due to chance.

12 Q What if it's equal to zero-point-one-zero?

13 A Well, we -- I'm sorry?

14 Q The P value is equal to or less than.

15 A Those are two different questions. Sorry.

16 Q Fine. What if it's equal to zero-point-one-
17 zero, the P value?

18 A Right. It says that your results could be
19 due -- are likely due to chance.

20 Q And if it says that the P value is less than
21 zero-point-one-zero, what does that indicate?

22 MR. SCHACHTMAN: Objection to form.

23 A Typically you say if the P value is less
24 than point-zero-five, then you say it's not likely due
25 to chance.

1 Q Right. And your P value is twenty times
2 that, correct?

3 A Right. For, for this analysis on age.

4 Q I understand.

5 Did you have P factors for any -- P values
6 for any other tables besides the age and the one-tail?

7 A Again, the confidence interval incorporates
8 the probability level.

9 Q Yes, sir. Look, I understand you like
10 confidence intervals.

11 A Yeah.

12 Q And I understand that they're in the paper.

13 A Right.

14 Q What I'm trying to find out is what may have
15 been in the paper before --

16 A Oh, we --

17 Q -- but it's not there now.

18 A No.

19 Q And I'd like to find out.

20 A No, that's, that's a different question. I
21 would not write a paper such as this with only P
22 values.

23 Q But you could write it with both, right?

24 A I could. But the confidence interval tells
25 you what -- gives you an idea if there's any

1 association or not.

2 Q And you did with respect to the one-tail
3 aspect?

4 A Trend? That was a trend, yeah.

5 Q Did you provide a P value?

6 A We provided a P value for the trend test,
7 yes.

8 Q Did you provide a P value at one time on
9 age?

10 A We did. Yes, we did.

11 Q Now, smoking, did you do an analysis in this
12 study to ascertain whether the original cohort had any
13 findings that tended to be at odds with general trends
14 and observations of diseases in this group overall?

15 A The goal of this study was to look at
16 neurodegenerative diseases.

17 Q I understand. But you have a cohort of
18 convenience here.

19 A Umh-humh.

20 Q So I'm trying to see if when you looked at
21 this convenient cohort that had already been gathered
22 together by someone else --

23 A Umh-humh.

24 Q -- did you look at the data dealing with
25 that cohort to see if there was anything in the cohort

1 that would raise some flags that perhaps there's
2 something going on here that makes me want to look at
3 this cohort a little bit closer? Did you do that?

4 A I'm sorry. I'm not sure what you're asking.

5 Q Did you look at the original published study
6 dealing with this cohort?

7 A Yes.

8 Q Did you look at the data generated by that
9 study?

10 A Yes.

11 Q Did you look at the data in that study to
12 see if there was anything unusual about disease
13 incidence or disease ratios or risk or anything about
14 what's going on in this population of six thousand
15 people in Denmark that looks a little bit unusual
16 compared to what your experience is as an
17 epidemiologist to what's going on in human beings all
18 over the world, or even in Denmark?

19 A Yeah, that's a very broad question. I -- we
20 had the Hansen paper which looked at lung cancer.

21 Q Okay. Is that Klaus Hansen?

22 A That's -- his first name is -- I think so.
23 I think it's Klaus. I'm not sure. I can --

24 Q And you don't know if he's related to Johnni
25 Hansen?

1 A I, I have no idea. Hansen is a very common
2 last name.

3 Q Okay. So you had the Hansen paper?

4 A Yes.

5 Q And you had the data, even? You all had
6 access to the underlying data?

7 A Yeah.

8 Q So if you had seen something in the paper
9 that made you wonder whether or not there was
10 something unusual in this group about disease, you had
11 somebody at your disposal who had at their disposal
12 the underlying records to see if there was something
13 happening?

14 MR. SCHACHTMAN: Objection to form and
15 foundation.

16 A The only disease information we had for this
17 cohort was the Parkinson's disease and the other
18 neurodegenerative diseases that we mention in the
19 paper.

20 Q You had smoking information, didn't you?

21 A But that's not a disease.

22 Q Diseases from smoking is, right?

23 A I, I didn't have information on diseases
24 from smoking.

25 Q Did the underlying paper have that

1 information?

2 A The underlying paper had information on lung
3 cancer.

4 Q And that was a study about lung cancer in
5 welders, right?

6 A Right.

7 Q Did you look at the lung cancer rate in
8 those welders in that first study?

9 A Yes.

10 Q Did you find it to be consistent with the
11 lung cancer rate for the general population of
12 Denmark?

13 A I, I didn't do that comparison.

14 Q If you had done that comparison and it
15 seemed to be out of kilter, would you have done
16 anything to address it in your study?

17 MR. SCHACHTMAN: Objection to form,
18 foundation.

19 A I'm not sure what I would do.

20 Q Is the author, Doctor Klaus Hansen, still
21 alive?

22 A Yes.

23 Q Did you have any discussions with him?

24 A No. I've never met him.

25 Q And as I understand it, he and his co-author



1 or authors, I can't remember, created this cohort, did
2 they not?

3 A Right.

4 Q And they created this cohort to do a study
5 of lung cancer?

6 A Yes.

7 Q Prior to the submission, or the original
8 submission to the journal, did you all, or had you all
9 ascertained the number of person years reflected in
10 Table 3?

11 A Prior to the submission -- I'm sorry?
12 Refresh me again. I'm sorry.

13 Q Prior to the initial submission to the
14 journal --

15 A Umh-humh.

16 Q -- had you all calculated the number of
17 person years as reflected on Table 3?

18 A All the person years were calculated prior
19 to submission to the journal, yes.

20 Q Okay. Is there a reason that they had to be
21 added after submission, initial submission?

22 A Not my knowledge.

23 Q Well, if you look at tables, under the
24 portion that says Table and it says No. 1, Table 3.

25 A I'm sorry. Where are you looking? Under



1 the reviewer comments?

2 Q Yes, sir.

3 A Okay. The reviewer asked us to add the
4 person years in the table.

5 Q Okay. So does that indicate to you that
6 person years had not been placed in that table at
7 initial submission?

8 A Right.

9 Q So did you have to calculate person years
10 after initial submission?

11 A No. They were already calculated. We just
12 had to put them in the table.

13 Q Is there a reason you did not put them in
14 for the initial submission?

15 A No, no reason.

16 Q Is there a reason this reviewer wanted them
17 in, that you know of?

18 A Not that I know of.

19 Q Is there an advantage to having it in there?

20 A Other than looking at -- giving more
21 description of the different populations.

22 Q In the portion above in the discussion, once
23 again dealing with smoking and PD, did you just
24 address smoking and PD, or did you address smoking and
25 Parkinsonism in your one-tailed study?



1 A The analyses are just for PD.

2 Q I'm sorry?

3 A The analyses are just for PD.

4 Q Did you look at the other neurological
5 disorders to see if there was any protective, or
6 protection afforded for those?

7 A No.

8 Q Did anybody else write any other part of the
9 initial draft of this paper? Did you delegate it at
10 all?

11 A No.

12 Q So when you first saw the three tables which
13 are -- did it have person years in the tables that you
14 first saw?

15 A I don't recall.

16 Q Were there data in those three tables that
17 are not in the three tables that we have here?

18 A No, there was no additional data.

19 Q And you don't have those original tables?

20 A No.

21 Q Does anybody?

22 A I don't think so.

23 MR. CROSBY: I will mark this subject to the
24 understanding that we can put the sealed cover sheet
25 on it and make sure that we're complying by whatever



1 rules we need to.

2 MR. SCHACHTMAN: Right. I think we should
3 let the reporter know that the exhibit Mr. Crosby is
4 about to mark is subject to a Protective Order and is
5 certainly available to all the parties and their
6 counsel subject to the terms of the Protective Order,
7 but that this deposition should not be generally
8 available other than to the parties and their counsel.
9 I should say the, the deposition and its exhibits.
10 And I guess that would be true of the videography.

11 MR. CROSBY: For the record, I will mark it
12 as Exhibit 8, and the copies that I will distribute
13 has the Protective Order attached for anyone that's
14 not familiar with it.

15 THE WITNESS: I'd just like to say that
16 Exhibit 7 also has the paper on it.

17 MR. SCHACHTMAN: Right.

18 MR. CROSBY: And what we might want to do is
19 detach it from 7 so we don't have to keep up with but
20 one, since all I questioned him on Exhibit 7 was the
21 reviewer comments.

22 MR. SCHACHTMAN: And the submission, the
23 transmittal letter.

24 MR. CROSBY: Is that agreeable with
25 everybody, that we on No. 7 remove the study so that



1 it's just -- Exhibit 7 is just the letter to journal
2 along with the reviewer comments? And Exhibit 8 will
3 be the paper in process.

4 (Deposition Exhibit No. 8 was marked for
5 identification and was attached to the transcript.)

6 BY MR. CROSBY:

7 Q Is this paper published yet?

8 A It will be out in May.

9 Q Does that mean it got Fast Track, or didn't
10 get it?

11 A It did not.

12 Q Do they let you know if something makes Fast
13 Track or not?

14 A They send you the proofs.

15 Q I'll ask you to please identify Exhibit 8,
16 please? Can you identify Exhibit 8 for us, please?

17 A Oh, I'm sorry. This is the paper we wrote
18 based on the welder study, the cohort study of
19 Parkinson's disease and other neurodegenerative
20 disorders in Danish welders.

21 Q You were identified as lead author, am I
22 correct, on the first page of that document?

23 A Yes.

24 Q Did anybody write any portion of this paper
25 other than you, other than editorial and comments that



1 we've discussed?

2 A Yes.

3 Q Who?

4 A Jens Peter Bonde wrote part. Jorgen Olsen
5 wrote part. And I think the rest were mainly
6 editorial.

7 Q Okay. What part did -- is it --

8 A I think Johnni Hansen wrote part as well.
9 Sorry.

10 Q And what part did Johnni Hansen write?

11 A One of the problems I have is usually they
12 combined their comments together on one draft and sent
13 it back to me that way. So it's difficult for me to
14 identify exactly who commented on what part.

15 Q No, I wasn't asking about commenting. I was
16 asking if anyone wrote any portion of the paper other
17 than commenting.

18 A Right. Well, they would include their
19 written portions in their comments. So, for example,
20 like the part on, on the validity study of Parkinson's
21 disease, they wrote that on the draft and they sent
22 that back to me.

23 Q So that entire segment dealing with the
24 validity study of the random sample was handwritten on
25 a draft and faxed?



1 A It was faxed back, yeah. I can't remember
2 if it was typed in the fax, or written.

3 Q What other parts did -- and who was in
4 charge of writing that, do you know?

5 A I, I assumed it was Johnni Hansen because he
6 was the one that was involved in that activity. But I
7 can't say for sure.

8 Q But was he the person in charge of that
9 study for the Danish group?

10 A And part of that segment of the study, yeah.

11 Q Okay. What about -- what did Doctor Bonde
12 write?

13 A He wrote -- let me look for a minute.

14 (Witness reviewing document.)

15 A He wrote about the levels of exposure to
16 metal fumes and welders on Page 14. And, also, I
17 think Doctor Olsen wrote the conclusion, or at least
18 the final sentence.

19 (Mr. Edmonson left the deposition.)

20 Q The exposure portion is the portion that
21 deals with some studies or analysis done of welding
22 fumes in Denmark?

23 A Yes.

24 Q But as I understand it, we don't know if any
25 of those studies overlapped with any of the people in



1 your cohort; am I correct?

2 A Correct.

3 Q Why did Doctor Olsen write the final
4 sentence?

5 A I think he wrote the final conclusion.

6 Q Did you sign off on it?

7 A Yeah.

8 Q Did everybody?

9 A All the authors did, yes.

10 Q So this is a real group consensus work?

11 A Absolutely.

12 Q Did they all feel as strongly about it as
13 you did?

14 A In terms of that it's a good study, yes.

15 Q I noticed in looking at your paper as
16 against Doctor Hansen's paper, that your numbers of
17 the population do not always overlap precisely with
18 his numbers in his paper.

19 A Umh-humh.

20 Q Is there a reason for that?

21 A Yeah. Some of the people had died in the
22 cohort after he had published it, so the numbers are
23 slightly different.

24 Q Is that the only reason?

25 A They may have immigrated out of the country



1 as well.

2 Q Did you all look at the same years in
3 population as he did?

4 A We used the same cohort as he did.

5 Q And did you use the same period of time that
6 he did?

7 A No. Our time was longer.

8 Q Okay. What was his time frame, do you
9 recall?

10 A I don't recall without looking at the paper.

11 MR. CROSBY: Let me mark as Plaintiff's
12 Exhibit 9, Cancer Incidence Among Mild Steel and
13 Stainless Steel Welders and Other Metal Workers by
14 Klaus Hansen and Jens Lauritsen and A. -- how do they
15 pronounce that?

16 THE WITNESS: I don't know.

17 MR. CROSBY: Skyttthe, I suppose, with
18 apologies to --

19 MR. SCHACHTMAN: The Dutch population, yeah.

20 MR. THOMPSON: What exhibit number is that?

21 MR. CROSBY: It's No. 9. I thought I had
22 more copies, but. . .

23

24 (Deposition Exhibit No. 9 was marked for
25 identification and was attached to the transcript.)



1 BY MR. CROSBY:

2 Q Is that the Hansen paper cited in your
3 paper?

4 A Yes.

5 Q And does this paper tell us what years were
6 under study by him?

7 A Yes, it does.

8 Q Okay. And what years was it?

9 A Let me look real quick here.

10 (Witness reviewing document.)

11 A We looked at the time period from 1964 to
12 1985.

13 Q And what period did you look at?

14 A 1964 to, I believe -- let me look at my
15 paper quickly.

16 Q Sure.

17 A I think we had dated it through '92 -- I'm
18 sorry. Through 2002.

19 Q And what years did you look at?

20 A The cohort was identified in 1964, so we had
21 workers back to the Sixties. But we ascertained the
22 outcome from 1977 to 2002.

23 Q And what did Doctor Hansen use to ascertain
24 outcome?

25 A The Danish cancer registry.

1 Q And did he use what years?

2 A I think he started in '6 -- hold on just --
3 1964 to '85.

4 Q And is the only reason for someone being
5 excluded from your study being that they died?

6 A Or they are lost to follow-up and that they
7 immigrated out, and I think those were the only
8 reasons.

9 Q So the only two -- are the only two reasons
10 for lost follow-up that they immigrated out or died?

11 A Umh-humh.

12 Q And did you do, or did anyone do any
13 analysis of the data to determine whether or not
14 anyone who was included in your cohort should be
15 excluded for any reason other than that?

16 A There were no other exclusionary criteria.

17 Q Looking at your Statement of Clinical
18 Significance.

19 A Okay.

20 Q The last sentence there says that it offers
21 assurances that men in mild and stainless steel
22 welding do not have increased hospitalizations for PD
23 or other neurodegenerative disorders.

24 A Yes.

25 Q Was that also your conclusion?

1 A That was my conclusion, yes.

2 Q Are you familiar with any studies by
3 Schoenberg or Gutman or others relating to the
4 incidence of hospitalization for Parkinson's disease?

5 MR. SCHACHTMAN: Objection; foundation.

6 A The only studies I know of are the ones I
7 quoted in the article.

8 Q Okay. If there is a potential for
9 underreporting of an incident, can it affect the
10 results of a study?

11 A It depends if, if it was done differently
12 for different groups in the study. But in our study
13 the reporting was done similarly for the welders and
14 for the background population.

15 Q Do you have any information as to whether or
16 not persons with Parkinsonism tend to be hospitalized
17 more frequently as they age with that condition?

18 A Parkinsonism?

19 Q Or Parkinson's disease.

20 A I don't have that information about Denmark.

21 Q Do you have that information about the
22 United States?

23 A No.

24 Q So do you have any information as to whether
25 or not a person diagnosed with Parkinson's disease or

1 a Parkinsonism or Parkinson's syndrome/disorder is
2 more likely to be hospitalized as they get older than
3 when they first contract the symptoms or the
4 condition?

5 A I don't have any information.

6 Q Did that have any impact on your study?

7 A It could have impact on the study.

8 Q What impact could that have?

9 A Little, if, if it was done similarly among
10 all the groups in the study.

11 Q But what impact could it be?

12 A If, if the outcome is hospitalizations for
13 Parkinson's disease, it would have no impact.

14 Q Would it tend to trend toward later
15 increased numbers of Parkinson's disease because as
16 people get older they go to the hospital for it?

17 A I don't know.

18 Q Do you know when it was first generally
19 known or publicized that welding rods contained
20 manganese?

21 MR. SCHACHTMAN: Objection to form.

22 Q Excuse me. First publicized that welding
23 rods contained manganese?

24 A I don't know when it was first publicized.

25 Q Do you know in Denmark when it was first



1 publicized to the medical community that welding rods
2 contained manganese?

3 A I do not.

4 Q Do you know if it is yet?

5 A I have no idea.

6 Q Are you familiar with the term threshold
7 limit value?

8 A No.

9 Q Or permissible exposure limit?

10 A Yes, yes.

11 Q What is a permissible exposure limit?

12 A It's the maximum -- to my knowledge, it's
13 the maximum level of exposure to a certain substance
14 that's allowable.

15 Q And do you know what the permissible
16 exposure limit was in Denmark between 1977 to 2002 for
17 welding fumes?

18 A I have no idea.

19 Q Or for manganese oxide?

20 A I have no idea.

21 Q Do you know what it is in the U. S.?

22 A No.

23 Q Could it have an impact on your studies with
24 respect to the incidence of disease in Denmark versus
25 the incidence of disease in the United States if the

1 threshold limit value or permissible exposure limit is
2 higher in Denmark -- excuse me, is lower in Denmark
3 than in the U. S.?

4 MR. SCHACHTMAN: Objection; form,
5 foundation.

6 A I think first you'd have to make the
7 assumption that there's an association with welding
8 fumes and a disease effect.

9 Q Yes. But if one is trying to ascertain
10 whether there is an association --

11 A Umh-humh.

12 Q -- and if one is studying a population where
13 the exposure limit in one country is threefold less
14 than it is in the other country, wouldn't that tend to
15 indicate that perhaps the exposure level the country
16 with the lower value would have a different result
17 than the one with the higher value?

18 MR. SCHACHTMAN: Objection; form and
19 foundation.

20 A I -- I'm not sure how that would -- how
21 individuals in those countries would be exposed.

22 Q I understand. And you're not for your
23 study, are you?

24 A Pardon?

25 Q And you don't know that for your study?



1 A Right.

2 Q But if the general population of welders is
3 exposed to three times as much welding fumes, or are
4 permitted to be being exposed to three times as much
5 welding fumes as the welders in Denmark, would that
6 indicate to you that the welders here are exposed to
7 greater amounts of welding fumes?

8 MR. SCHACHTMAN: Objection to form and
9 foundation.

10 A Yeah, I don't have any information on the
11 exposure levels of individuals.

12 Q Your study, as I understand it from Page 5,
13 excludes all shipyards, correct?

14 A Yes.

15 Q That was not a welding-related exclusion,
16 was it?

17 A I don't understand what you're asking.

18 Q You didn't exclude welders from shipyards
19 because you were studying Parkinsonism? I misspoke,
20 I'm sorry.

21 A That was the original study design when they
22 were trying to study lung cancer. They excluded them
23 because they didn't want people exposed to asbestos in
24 their study and they were concerned that that would be
25 a confounding effect of any association with lung



1 cancer.

2 Q If you had selected a cohort or had your
3 druthers, would you include shipyard welders?

4 A I, I would try to include as many people as
5 I could. I'd want to get the largest cohort I could
6 find.

7 Q Is it a limitation on your study that it
8 does not include shipyard workers -- or welders?
9 Excuse me?

10 A Yeah, I don't, I don't know if I would call
11 it a limitation. It's just you -- I mean, we -- the
12 study, the original study was designed to look at
13 welding fumes and the health effects of welding fumes,
14 so people in the study are exposed. And we're able to
15 get information on levels of exposure by duration of
16 work, and when we looked at duration of work we didn't
17 find any effect. So I, you know, I'm not sure.

18 Q Have you ever been to a shipyard where
19 welders are welding?

20 A I have not, no.

21 Q Have you ever been into any of these
22 factories or plants that were the subject of this
23 study to see where welders were welding?

24 A No.

25 Q Do you know what any of these factories or

1 plants do or did?

2 A No, I don't.

3 Q So do you have any understanding or
4 appreciation whatsoever as to whether or not the
5 people engaged in whatever welding activities they
6 were engaged in in Denmark is remotely resembling what
7 welders do in shipyards, let's say, in the United
8 States?

9 A I have no knowledge one way or the other.

10 Q Okay. Do you have any idea as to whether or
11 not these welders in your study have anything similar
12 in their exposure to welding fumes as, say, welders in
13 the construction trades in the United States?

14 A No, I don't know.

15 Q So we don't know what they're welding in
16 your study, do we?

17 A Correct.

18 Q And we don't know under what circumstances
19 or conditions, do we?

20 A Right.

21 Q We do know it's in factories?

22 A Right.

23 Q And factories generally have superior
24 ventilation and industrial hygiene facilities to other
25 places, do they not?

1 MR. SCHACHTMAN: Objection to form and
2 foundation.

3 A I don't know that. I didn't visit the
4 factories.

5 Q Would you agree with me that, generally
6 speaking, the Danes are considered to be and have been
7 more aware of occupational health effects than the
8 U. S.?

9 MR. SCHACHTMAN: Objection; foundation.

10 A I, I don't know. One of the beauties of
11 this study, we had information on welders back in the
12 Sixties and Seventies when, when those conditions
13 were -- when the, when the levels were higher of
14 welding fumes in the factories and things like that.

15 Q And those would be the older welders, right?

16 A Yeah.

17 Q And did they smoke more?

18 A They smoked the same as the general
19 population.

20 Q But did the older welders smoke more than
21 the younger welders?

22 A That I don't know.

23 Q Is that information you sought to ascertain
24 for the one-tailed study?

25 A We looked at smoking overall in the



1 population.

2 Q Did you attempt to ascertain whether the
3 older guys smoked more than the younger guys?

4 A I'm not sure why we would do that.

5 Q I understand you might not know why you'd do
6 it, but did you?

7 A No, we did not.

8 Q Okay. Now, in your study, as I understand
9 it, you had seventy-four companies that remained
10 representing sixty percent of all the stainless steel
11 welders in Denmark; am I right?

12 A Yes.

13 Q You eliminated all the companies with less
14 than five stainless steel workers, right, welders?

15 A Mind you, I didn't do any of this. This was
16 data already collected by Hansen.

17 Q Right.

18 A So the Hansen study did these things, yes.

19 Q All right. And do you have any
20 understanding based on your experiences as to whether
21 or not smaller shops have higher intensity of exposure
22 to welding fumes than big facilities?

23 A I don't know if that's true or not in
24 Denmark.

25 Q Okay. What effort, if any, did you



1 undertake when you were doing this study in 1986 --
2 excuse me, in 19 -- no, you're not, you're in 2004.
3 He was in '96. I'm sorry.

4 A Yeah.

5 Q -- when you were undertaking the study in
6 2004 to ascertain where the other forty percent of the
7 stainless steel welders in Denmark were?

8 A No.

9 Q Would that have been one of those things
10 that would have been closer to the dream study?

11 A The study was based on an established
12 cohort, so we used the information that was already
13 available.

14 Q This is the cohort of convenience?

15 A This is -- this is the Hansen cohort.

16 Q Right. But it was convenient, right? There
17 it was.

18 A It was convenient for us, not for him. It
19 was a lot of work for him.

20 Q I understand. And you all chose not to
21 build on it?

22 A Correct.

23 Q Do you know whether or not the other forty
24 percent were shipyard workers?

25 A I don't know who they were.



1 Q Do you know why there was a decision to
2 include mild stainless steel as opposed to just all
3 stainless steel?

4 A I don't know why.

5 MR. SCHACHTMAN: Excuse me. Did you say
6 mild stainless steel?

7 MR. CROSBY: I'm sorry, yes, I think I did.
8 Mild steelworkers, I'm sorry. Thanks.

9 MR. SCHACHTMAN: We're all getting a little
10 tired.

11 MR. CROSBY: Yes, and I'm. . .

12 BY MR. CROSBY:

13 Q Now, let me ask you this. When it comes to
14 your efforts to ascertain job description, what all
15 did you do?

16 A We used the questionnaire information.

17 Q And the questionnaire information, did it
18 supplement, or did it supplant the National
19 Supplementary Pension Fund Data?

20 A Yeah, the National Supplementary Pension
21 Fund was used to tell -- my understanding of the
22 Hansen study, was used to identify companies where
23 welding was performed, and then they were able to
24 determine welding departments, and from those they
25 administered questionnaires, and from the

1 questionnaires they identified welders.

2 Q Did you use any of the data from any
3 governmental agency to assist in ascertaining that a
4 person was correctly identified as a welder?

5 A The Hansen study did.

6 Q Did you all?

7 A No.

8 Q So did the Hansen study use both the
9 questionnaire and governmental registries?

10 A Yes.

11 Q And did the Hansen study make any
12 determinations or offer any observations with respect
13 to how comfortable they were with respect to the
14 classification of those who were known as welders?

15 MR. SCHACHTMAN: Objection to form.

16 A Would you please repeat the question?

17 Q In the Hansen paper --

18 A Umh-humh.

19 Q -- did they make any comments or
20 observations with respect to their comfort level that
21 welders were properly identified as to occupation?

22 A I -- I'm not sure what the Hansen paper
23 commented on that.

24 Q Have you read the Hansen paper previously?

25 A I've read it previously, yes.

1 Q Have you read any Hansen paper relating to
2 this cohort other than the one that is marked as
3 Exhibit 9?

4 A No, I haven't.

5 Q What weaknesses or limitations are there in
6 your study?

7 A I would say one limitation is that we don't
8 have information on welding after 1986, that's when
9 the welding information ended. But we did have enough
10 information to classify people as welders.

11 Another -- I don't know if it's a
12 limitation, but we used -- using the hospitalization
13 rates of Parkinson's disease, you know, we couldn't
14 look at mild forms of Parkinson's. But that didn't
15 bias the study because we were able to look at
16 hospitalization rates for both welders and the
17 background population. So everyone -- disease was
18 ascertained similarly for everyone in the study.

19 Q Any other weaknesses or limitations?

20 A There was some more information, specific
21 information on welding, but the number of people with
22 Parkinson's disease was too small to really look at,
23 look at that information.

24 Q Could you elaborate on that a little bit?

25 I'm not sure I'm following --

1 A Yeah. Let me --

2 Q -- what you're saying there, I'm sorry.

3 A Do you mind if I look in the paper?

4 Q Oh, no. Listen, this is really an open-book
5 test. I want to know --

6 A Right.

7 Q -- what you do know.

8 A Umh-humh.

9 Q And I want to know your opinions. I guess
10 what I do at times when I try to sort of go back to
11 some of my questions is I'm trying to get answers to
12 my questions as well, but I really do want to know
13 what you know.

14 A Okay.

15 Q And how you know it and what your opinions
16 are.

17 A Okay. Right.

18 In terms of welding characteristics, we
19 didn't, we didn't have industrial hygiene data to
20 actually determine the level of exposure to the
21 individuals in the study. But as I mentioned
22 previously, we did have kind of a proxy to that with
23 the duration of work.

24 Q Well, is that what you mean by the number of
25 Parkinson's disease or Parkinsonism was too small to



1 ascertain the different types of welding in fact? Or
2 did I misunderstand what you said about that?

3 A No. It's when you start categorizing the
4 individuals into different categories, you start
5 ending up with so many categories that you have only
6 one person or two people in a category and it's
7 difficult to draw any conclusions based on just one
8 case or two cases.

9 Q Does that get back to power?

10 A It gets back to study size.

11 Q I mean, a population of ten thousand people
12 with a thousand people with a disease would be more
13 significant, would it not, than a study of ten people
14 and one person with a disease?

15 MR. SCHACHTMAN: Objection; foundation.

16 Q Generally speaking?

17 A It depends on what your disease is, yeah.
18 But I feel we had pretty good power. We were able to
19 exclude risk greater than fifty percent, so that's,
20 that's pretty good. And our point estimate actually
21 showed a, no association at all. Actually, a slight
22 negative association, nonstatistically significant
23 negative association with welding.

24 Q Have you told me all the weaknesses?

25 A All that I. . .



1 Q What would be the result of the weakness or
2 limitation of not having the welding level information
3 after 1986, what would that be?

4 A I'm not sure because I don't have the
5 information.

6 Q Do you know if it biases toward the null?

7 A I don't know which way it would bias it.

8 Q Using hospitalization, which prevents or
9 limits seeing mild Parkinson's disease or
10 Parkinsonism, what, if anything, will that have on the
11 study and the conclusions?

12 A The only concern that it would have on the
13 study is if hospitalization rates are ascertained
14 differently in the welders and in the general
15 population, and that wasn't done. Their
16 hospitalizations were ascertained the same way for all
17 groups.

18 Q So then, if I'm understanding your
19 hypothesis, your hypothesis is that all people,
20 welders or not, will be suffering from mild or early
21 onset Parkinson's disease or movement disorders at the
22 same time and at the same rate?

23 A No, no. I'm just saying that we couldn't
24 pick those up.

25 Q All right. So if there is in fact an

1 increase incidence of Parkinsonism or movement
2 disorders in welders at a younger age, at an early age
3 of onset, let's say, at a mild level that does not
4 cause hospitalization, then it won't get picked up,
5 will it?

6 A Right, our study would not be able to pick
7 that up. The problem is trying to figure out what the
8 comparison or background population rates would be in
9 that type of study.

10 Q But they wouldn't be in the hospital
11 records --

12 A Right.

13 Q -- because they're not going?

14 A Right.

15 Q But what you've got there is if there is an
16 increased incidence of early onset or even middle-age
17 onset of Parkinsonism or movement disorder symptoms
18 that doesn't trigger hospitalization in welders, it
19 won't be picked up by this study?

20 A Right, that was not, not the goal of this
21 study.

22 Q Right. The goal of this study, and -- well,
23 you tell me what was the goal of the study.

24 A To look at the rate of hospitalizations and
25 other neurodegenerative diseases in welders.

1 Q Okay. So this is getting to full-blown
2 Parkinsonism and fully ascertainable neurodegenerative
3 diseases?

4 A Yes.

5 MR. SCHACHTMAN: Objection to form and
6 foundation.

7 Q You make the statement on Page 5 at the
8 bottom: Information on all employees with respect to
9 name - this is the last sentence - name, unique
10 personal identification number, PIN, company tax
11 number, and date of start and end of each employment
12 is computerized and retained even after a person
13 retires or died.

14 A Umh-humh.

15 Q And the data in this registry, being the
16 National Supplementary Pension Fund Registry, is
17 regarded as complete.

18 A Yep.

19 Q By complete do you mean accurate and
20 reflective of occupation, or do you mean just they
21 finished the work?

22 A No. We mean that any information -- any of
23 this type of information is recorded in this registry.

24 Q Okay. So it would be reliable and give you
25 good data?



1 A Absolutely.

2 Q Did Doctor Hansen use that same system?

3 A Yes. Yeah.

4 Q Is that the, sometimes called the ATP
5 registry or company records? Well, ATP registry, do
6 you know?

7 A Where are you looking? I'm sorry.

8 Q I'm looking at the Hansen paper.

9 A Okay.

10 Q On Page 377, at the bottom.

11 A It appears that's, that's one of the
12 systems, yeah, one of the registries.

13 Q And they refer to the records from the
14 Public Supplementary Pension Fund as the ATP?

15 A Yes.

16 Q And that's the one you say is complete?

17 A Yes.

18 Q And does he say after that sentence,
19 beginning at the last part of 377: As many as forty-
20 three percent of the workers employed in the involved
21 companies during the years '64 to '84 were identified
22 from the ATP records only?

23 A Umh-humh.

24 Q A drawback to the ATP registration is
25 imprecision of job title?

1 A Umh-humh.

2 Q Is that inconsistent with what you were
3 saying?

4 A No. That's why they sent out the
5 questionnaires, to, to confirm that they were welders.

6 Q But I understood that you said that that was
7 a complete, as in reliable, data --

8 MR. SCHACHTMAN: Objection.

9 Q -- from the registry.

10 MR. SCHACHTMAN: Objection to form.

11 A Yeah, I'm sorry. I'm confused by your
12 question.

13 Q A few questions back I asked you if when it
14 says that the data from that registry is complete
15 meant that it was finished or if it was reliable.

16 A Umh-humh.

17 Q And I understood you to say that it was
18 reliable.

19 A Umh-humh. It's complete, yeah.

20 Q Didn't you say it was reliable?

21 A It was -- the registry was used, the ATP --
22 he's calling it the ATP registry, was used, used to
23 identify areas in which people were welding. They
24 further supplemented that with a questionnaire to, to
25 capture the people who actually were welding in those



1 areas.

2 Q Would you agree with his statement that
3 reliance on the ATP register or to the company records
4 seems to result in incorrect cohort ascertainment?

5 A My confusion there is I've never looked at
6 this registry, so I'm relying on what Doctor Hansen
7 did.

8 Q Right.

9 A So I've never gone in and looked at job
10 titles or anything in the registry.

11 Q So you're not really in a position under
12 oath to comment with respect to the reliability of the
13 welder classification for the people in the study?

14 MR. SCHACHTMAN: Objection.

15 A That's not true, no.

16 Q Okay. On what would you base it, then?

17 A The questionnaire data.

18 Q But you've not seen that, either, have you?

19 A I have not -- I have seen the summary data
20 from the Danes.

21 Q Did you have concerns about the long-term
22 exposed group and what that data may yield in terms of
23 person years --

24 A I'm not --

25 Q -- and exposure?

1 A I'm not sure what you're referring to.

2 Q In your number of person years in the long-
3 term exposed group, is it small, in your population?

4 A I'll have to look.

5 (Witness reviewing document.)

6 A For people who worked more than ten years we
7 had about seventy-three thousand person years.

8 Q Right. In the general, big picture of
9 things, is that big, or small?

10 A It depends on what it's relative to. It's
11 almost -- it's more than the number of person years
12 for people who worked less than ten years.

13 Q Okay. Now, Doctor Hansen in his original
14 paper, as I understood it, did a follow-up to randomly
15 sample the classification of welders, not only by
16 questionnaire, but by interview. Are you familiar
17 with that?

18 A No.

19 Q I'll be quick on this.

20 I think I asked you, the primary diagnosis
21 is the only one you all used, right?

22 A Yes.

23 Q And you don't know if that was on admission
24 or discharge?

25 A I don't know, right.



1 Q Okay. And you all only used first-time
2 hospitalization?

3 A Right.

4 Q Okay. So if somebody's first time to go to
5 the hospital was a car wreck and their second time was
6 to go because of Parkinson's disease, you all would
7 have the car wreck for that welder?

8 A No, no. The first time that the
9 hospitalization was due to Parkinson's disease, that
10 was it.

11 Q Now, what about for those who didn't have
12 Parkinson's disease?

13 MR. SCHACHTMAN: Objection to form.

14 A I'm not sure what you're asking about those.

15 Q Did you compare the population of people
16 without Parkinson's disease as to what their first
17 hospitalization was?

18 A That wasn't a goal of the study.

19 Q I understand it might not have been a goal.
20 I'm just asking if you did it.

21 A No.

22 Q Did you do any analysis as to the hospital
23 records of nonwelders?

24 A Yes.

25 Q And what was that analysis?

1 A We looked at the first hospitalization for
2 Parkinson's disease and the other diseases of interest
3 in our paper for people who were not welders as well.

4 Q So if you were -- if you were a nonwelder
5 and your first hospitalization was a car wreck, that's
6 what you would record?

7 A No.

8 Q You wouldn't record anything?

9 A We were only interested if their -- the
10 hospital discharge said Parkinson's disease or one of
11 the other diseases.

12 THE VIDEOGRAPHER: We're going off the video
13 record. The time is 4:06 p.m.

14 (A short recess was taken.)

15 THE VIDEOGRAPHER: We are back on the video
16 record. The time is 4:21 p.m.

17 BY MR. CROSBY:

18 Q Briefly, Doctor, I think you were here when
19 we had a discussion off the record and counsel
20 explained that you were going to be basically called
21 to testify about this study which is not yet published
22 and may not be published at a point when there may be
23 a hearing or a trial, and that is the limit to which
24 you're going to be called. Is that your
25 understanding, too?



1 A Yes.

2 Q And you're not going to comment on studies
3 of others, even the study by Doctor Russett?

4 A Correct.

5 Q Okay. Do you plan on commenting about
6 statements contained in either Doctor Wells' or Doctor
7 Louis' declaration?

8 A If, if they're specific to my study, yes.

9 Q Okay. Has anybody talked to you about what
10 testimony Doctor Garabrant or Doctor Goldwin or others
11 have given in this litigation with respect to your
12 study?

13 A I read Doctor Garabrant's deposition about
14 my study. Other than that, I haven't. I don't know
15 anything else.

16 Q I guess since what you're going to do is
17 come in and testify about your study and explain it,
18 I'd like to go ahead and hear it now. So feel free.

19 A The details on how we conducted the study?

20 Q And what the results are and --

21 A Okay.

22 Q -- what you believe it shows and what you
23 would tell a court or a jury --

24 A Umh-humh.

25 Q -- if the lawyer said tell us about your



1 study and what you did and what it shows.

2 A Okay. In our study we looked at people who
3 worked in the welding industry. We ascertained
4 information on about twenty-seven thousand people.
5 From those people we were able to identify people who
6 worked in welding departments, and the people who
7 worked in welding departments we administered a
8 questionnaire, and from the questionnaire we
9 identified between six and seven thousand people.

10 Q Let me interrupt you just a second.

11 A Umh-humh.

12 Q You're saying that we administered a
13 questionnaire. You all didn't administer a
14 questionnaire.

15 A I did not personally, right. I'm talking
16 about myself and I'm talking about my collaborators.

17 Q But none of the collaborators on your study
18 administered a questionnaire either, did they?

19 A Yeah, yeah. They did.

20 Q Which questionnaire did they administer?

21 A The original questionnaire in '86.

22 Q Who was on your study that's on the '86
23 study?

24 A Axle Sytes, Skytes (phonetic).

25 Q And was he involved in the questionnaire

1 aspect?

2 A I'm not sure exactly what his role was, and
3 I'm not sure if it was a him or a her.

4 Q Okay. So I take it you haven't met that
5 doctor?

6 MR. SCHACHTMAN: Axle. We just call him
7 Axle.

8 Q Skyttthe, however it's said.

9 A No, I have not met him.

10 Q But he did that, or she did that, or the
11 doctor who is a Ph.D. doctor did that back in '86?

12 A Yes.

13 Q Okay. So what I want to try to do is keep
14 it clear as to what you all in your group did for your
15 particular undertaking.

16 A Okay.

17 Q Okay?

18 A Okay.

19 Q So go ahead, though, please. I'm sorry.

20 A All right. So after we assembled the
21 cohort, then, of about twenty-seven thousand people
22 who worked in the welding industry, we linked them --
23 we didn't link them, though, the National Board of
24 Health and Welfare linked them to the hospitalization
25 registry, the mortality registry, the immigration



1 registry, to ascertain hospitalizations due to
2 Parkinson's disease. The National Board of Health and
3 Welfare also determined the rates of hospitalizations
4 for Parkinson's disease among the general population.

5 Then using standardized methods we
6 calculated SHRs, which is standardized hospitalization
7 rates, to see if welders were hospitalized more
8 frequently for Parkinson's disease than people in the
9 general population. And our study found that in fact
10 there was no statistically significant increase risk
11 in hospitalizations for Parkinson's disease for
12 welders.

13 Q Okay. Now, is that what you would basically
14 say --

15 A Basically, yes.

16 Q -- if you had an opportunity?

17 And let me ask you, you have twenty-seven,
18 in round numbers, twenty-seven thousand welders,
19 correct?

20 A No. It was about six thousand. There were
21 about twenty-seven thousand that were in the industry.

22 Q Right. Twenty-seven thousand in that
23 industry overall in some twenty-odd facilities?

24 A Whoever was in the retrospective, whoever
25 was in the Hansen cohort.



1 Q But is your twenty-seven thousand people the
2 same twenty-seven thousand people that are in Doctor
3 Hansen's other than the loss to follow up by either
4 immigration or death?

5 A Umh-humh.

6 Q Or does your twenty-seven thousand pick up
7 people that were not in Doctor Hansen's twenty-seven
8 thousand so that, let's say, for instance, five
9 hundred people that were in his have died or left the
10 country, was it filled back up with five hundred new
11 people that entered the trade?

12 A Umh-humh. No, no. We only used his cohort.

13 Q And so your six thousand or so welders would
14 be the same six thousand or so welders that he saw
15 except for those that have left Denmark or died?

16 A Yeah. Six thousand, one hundred and sixty-
17 three.

18 Q Do you remember how many he -- how many
19 welders he had?

20 A No. But I can look in the paper.

21 Q That's all right.

22 A Okay.

23 Q Did you notice any trends in your study?

24 A Trends in?

25 Q In incidence of Parkinson's disease or

1 Parkinsonism or the diseases that you studied.

2 A Umh-humh. We did not notice any
3 statistically significant trends in our study.

4 Q Did you notice any trends that in your
5 opinion were not statistically significant?

6 A We noticed -- let me look at the data.
7 (Witness reviewing document.)

8 A I, I guess you could make a judgment about
9 increasing or decreasing point estimates. But none of
10 the trends that we looked at in Table 3 were
11 statistically significant.

12 Q Tell us what you mean by point estimates,
13 please.

14 A The SHRs.

15 Q And how do you mean that you see -- perhaps
16 seen a trend but is not statistically significant with
17 respect to SHRs?

18 A Yeah. You can look at the SHRs over the
19 different categories of the, of the variables, and
20 just look to see if they go up or down.

21 Q And what do you observe?

22 A For calendar time period, it appears that
23 the SHR goes up slightly.

24 Q Which table are you looking at?

25 A Table 3. I'm sorry.



1 Q Okay.

2 A It goes -- from zero-point-eight-zero to
3 zero-point-eight-eight. But the confidence intervals
4 overlap indicating that there's, there's really no
5 trend or increase in, in SHRs over time. You can look
6 at attained age and see that the point estimate goes
7 for less than sixty-five is one-point-one-three and at
8 sixty-five years or older is zero-point-seven-one.
9 But, again, none of these trends are statistically
10 significant.

11 Q Insignificant, or significant?

12 A They're, they're -- none of them are
13 statistically significant.

14 Q What would it have to have in it for it to
15 be statistically significant in your opinion?

16 A We calculate a trend test, and if the P
17 value for that was less than zero-point-zero-five,
18 then it would be significant.

19 Q So you would do a P value there?

20 A That's the only way you can do a trend test.

21 Q Was that done?

22 A Yes.

23 Q And what was the P value?

24 A It's reported for smoking, it's zero-point-
25 zero-seven.



1 Q Was there one done for any of the other
2 aspects of Table 3?

3 A Not formally because when you look at them,
4 just eyeball them, it doesn't really appear to be a
5 trend in any of the categories.

6 Q So let's look at the tables. Looking at
7 Table 1.

8 A Umh-humh.

9 Q Tell me, please, what you wanted to
10 demonstrate by including Table 1 in this paper.

11 A This just shows the characteristics of the
12 study cohort.

13 Q And what do you mean by the characteristics
14 of the study cohort?

15 A How many years they were followed up; the
16 number of people in each cohort; the mean years that
17 they were followed up; what their vital status was at
18 the end of our follow-up period; their year of birth;
19 and then their smoking status. Oh, I'm sorry. Also
20 at the bottom we have the age when Parkinson's disease
21 was onset.

22 Q And the smoking status portion?

23 A Umh-humh.

24 Q There are no data under employees in welding
25 companies and workers in welding department, it's all



1 under total and then broken out into the sum under
2 welders?

3 A Right. The questionnaire was only
4 administered to people who they suspected were
5 welders, worked in welding departments.

6 Q And what is -- with respect to age at
7 Parkinson's disease onset have a ninety-five percent
8 confidence interval?

9 A No, I'm -- yeah. That's actually kind of --
10 that's a range, I think.

11 Q Okay. Could you then tell me what those,
12 each of those numbers in each of those columns is
13 there to show?

14 A For? I'm sorry.

15 Q Age at Parkinson's disease onset, paren,
16 ninety-five percent, CI, closed paren.

17 A Right. That -- for employees in the welding
18 companies, that's the average age of onset for those
19 who had Parkinson's disease.

20 Q That's seventy people?

21 A No. Seventy years.

22 Q I'm sorry. Seventy years of age?

23 A Yeah. And they're between sixty-eight and
24 seventy-two.

25 Q All right, sir.



1 A And then for welding department it was
2 sixty-eight, between sixty-four and seventy-two. And
3 sixty-nine for people who responded to the
4 questionnaire. And then sixty-seven for welders.

5 Q Is it a mean age, then, or is that just --

6 A Yeah, it's -- I think in the paper -- let me
7 look in the paper. I think we reported it as a mean
8 age. Right. It's the mean age.

9 Q So am I to gather from this - and please
10 help me if I'm incorrect --

11 A Umh-humh.

12 Q -- that the mean age -- or, excuse me, the
13 range using the CI --

14 A Umh-humh.

15 Q -- for employees in the welding companies,
16 someone could be as young as sixty-eight or as old as
17 seventy-two?

18 A Well, this is --

19 MR. SCHACHTMAN: Objection to form.

20 A Well, yeah, this is, this is really kind of
21 a confidence interval, so it's the, it's the deviation
22 around, around the age.

23 Q What does that mean?

24 A That for welding departments specifically,
25 if someone -- we said that the mean age in the welding



1 department was seventy years old. So ninety-five
2 percent of the time if you resampled them, the age
3 would be between sixty-eight and seventy-two.

4 Q Yeah, but that's in welding companies, you
5 mean?

6 A Yes. I'm sorry, in -- at what age did --

7 Q I thought you said employees in welding
8 departments, but seventy is --

9 A Let me look at the table.

10 I'm sorry. Welding companies, yeah.

11 Q Is the text at variance to the table?

12 A No, I don't, I don't believe so.

13 Q All right. So I'm just trying to help you
14 before it's published if it is.

15 A Yeah, absolutely. I appreciate that.

16 Q So, then, that means that ninety-five
17 percent of the time under the confidence interval they
18 will be that age, but there could be five percent of
19 the time some of them would be younger than that or
20 older than that?

21 A Right. But the mean age is seventy.

22 Q Okay. And is that the way it was done for
23 all those ages in those categories?

24 A Right.

25 Q Person years, how did you calculate the



1 person years?

2 A Person years, for each individual was when
3 they entered the cohort, and we followed them until
4 either they immigrated, died, or developed Parkinson's
5 disease. So we discounted the number of years for
6 each person and added them up.

7 Q And then how does it -- let's go to, I
8 guess -- this table - tell me if I'm wrong - does it
9 address any incidence of Parkinson's disease other
10 than telling us the age?

11 A No, this -- no. It doesn't.

12 Q Okay. What table do we need to go to for
13 that?

14 A Table 2.

15 Q And help me with what Table 2 shows.

16 A Table 2 gives us the different disease
17 categories that we looked at; the number of
18 observations for the different disease categories,
19 Parkinson's disease, secondary Parkinsonism; and then
20 the standardized hospital rates; and the ninety-five
21 percent confidence intervals.

22 Q And what was that table presented for, what
23 would you want to show with that?

24 A To see if there was an excess of any of the
25 diseases we looked at among welders, a statistically



1 significant excess.

2 Q When you provided the first submission to
3 the journal --

4 A Umh-humh.

5 Q -- it didn't have any confidence intervals?

6 A No, it did.

7 Q Were there places where it did not?

8 A No.

9 Q Well, in the questions or the comments by
10 the viewers, where it says in the text: I would also
11 be interested to see the exact P value rather than P
12 is greater than zero-point-one-zero.

13 A Umh-humh.

14 Q In your response you state: We have also
15 provided the confidence interval.

16 A Right.

17 Q Which leads me to believe that there was no
18 confidence interval.

19 A There was confidence intervals in the paper
20 before.

21 Q So is it your interpretation that this
22 reviewer simply ignored the confidence intervals?

23 A No. He was talking --

24 MR. SCHACHTMAN: Objection to form.

25 A He was talking about the confidence



1 intervals around age. But all the other measurements
2 had confidence intervals.

3 Q So did you all add them as to age?

4 A I'm sorry?

5 Q Did you all have to add them as to the age
6 aspect?

7 A Add?

8 Q Confidence intervals.

9 A We did add confidence intervals for age,
10 yes.

11 Q Now, in looking at No. 2, Table 2.

12 A Umh-humh.

13 Q Looking at Parkinson's disease, there were
14 sixty-nine observed under employees and welding
15 companies with an SHR of zero-point-nine and a ninety-
16 five percent confidence interval of zero-point-seven
17 to one-point-two, correct?

18 A Correct, yes.

19 Q For all welding exposed workers, there's
20 twenty-five observed with an SHR of one-point-zero, a
21 confidence interval of zero-point-seven to one-point-
22 five, correct?

23 A Right.

24 Q And then you have another category of
25 questionnaire, response status of welders, metal



1 workers and nonresponders. Is that a breakout of the
2 all welding group?

3 A That's a breakout of people who were
4 submitted the questionnaire.

5 Q Were all of the people under all welding
6 exposed, second column, Table 2, submitted the
7 questionnaire?

8 A I believe so. I think the numbers add up.
9 Let me. . .

10 (Witness reviewing document.)

11 A I believe so.

12 Q Okay. So these are subsets of Column 2?

13 A Yeah.

14 Q And as I understand the ninety-five percent
15 confidence interval with respect to the numbers that
16 are parenthetical --

17 A Umh-humh.

18 Q -- does that mean that if you were to look
19 at this population or a similar population, for
20 example, under metal workers where there were eight
21 observed and an SHR of zero-point-nine, that there
22 was -- there is a five percent chance that it could be
23 less than zero-point-four or greater than one-point-
24 eight?

25 A I would agree.



1 Q And there's a ninety-five percent likelihood
2 that it would hit somewhere in between those two?

3 A Right. But your best estimate is that it's
4 zero-point-nine.

5 Q But -- now, does that number get arrived at
6 by like averaging or a mean number? How do you all
7 come up with a number like where to put that zero-
8 point-nine? Did you do that yourself?

9 A No. It's a computer package that estimates
10 that number for us.

11 Q Okay. And whose computer did the estimating
12 for this study?

13 A All the analyses were done in Denmark.

14 Q And is that that SAS program you're talking
15 about?

16 A Absolutely, yeah.

17 Q How often do they update and change their
18 program?

19 A SAS, or --

20 Q Yes.

21 A I don't know.

22 Q Would it have been -- was there a SAS around
23 back in 1997?

24 A Yes.

25 Q '96?



1 A Yeah.

2 Q When Doctor Hansen did his first study?

3 A I'm not sure.

4 Q Do you know if he used the same program that
5 you all used?

6 A I, I have no knowledge if he did or not.

7 Q Would it make a difference?

8 A No.

9 Q Why is that, that you seem confident that it
10 would not?

11 A Because they used the same statistical
12 formulas.

13 Q What did you physically do that contributed
14 to this study?

15 A I wrote the paper and designed the analysis.

16 Q Okay. And how did you go about designing
17 the analysis?

18 A I looked at the type of information on the
19 questionnaire and the type of information we were
20 ascertaining, and I created the tables.

21 Q Okay. And did you create the tables, or did
22 you have to write any programs, did you have to design
23 any formulas to do any of the work that you did?

24 A I had our statistician do the computations
25 for me.



1 Q Okay. But did you have to tell him or her
2 what computations to do?

3 A I gave him an outline of the table that I,
4 that I was interested in looking at, and -- I'm sorry,
5 she, and she was able to, to complete those for me.

6 Q So you didn't deal with any of the details
7 with respect to how the numbers were actually
8 generated?

9 A I did not do any of the programming.

10 Q And looking at Table 3 -- well, let me go
11 back to Table 2 for just a minute, I'm sorry. Table
12 2. If something was in your study that caused it to
13 bias toward the null by something like zero-point-five
14 to zero-point-eight, and you increased your range in
15 your ninety-five percent CIs by those numbers, would
16 it give you an approximation of your CIs?

17 MR. SCHACHTMAN: Objection to form.

18 Q Or would you have to recalculate the CIs
19 altogether?

20 MR. SCHACHTMAN: Objection to form.

21 A I'm sorry. I'm not sure what you're asking.

22 Q If there was something about your study that
23 created a bias toward the null to somewhere around
24 zero-point-five to zero-point-eight --

25 A Umh-humh.



1 Q -- would you increase the range in your
2 confidence interval by those numbers?

3 A My understanding of bias is bias is an issue
4 of study design, it's not an issue of analysis.

5 Q Okay. So if Doctor Hansen was of the view
6 that there was an underestimation of relative risk
7 with respect to some aspect of this cohort, would that
8 have any impact in your view?

9 A I have no idea how that would impact the
10 study.

11 Q Okay. Would you look at Page 379, please,
12 sir, of the Hansen paper.

13 A Okay (complying).

14 Q And I guess it's somewhat like your group's
15 random sampling of hospital records. Do you recall
16 that Doctor Hansen did a random sampling of a hundred
17 and eighteen cohort members with respect to
18 occupation?

19 A I, I had no knowledge of that.

20 Q Okay. If you would look at Page 379.

21 A Okay (complying).

22 Q In the left column. And we will, the first
23 part is, expose your assessment in a historical cohort
24 study has an inherent possibility of introducing bias
25 because of the use of different sources of exposure



1 data for living and deceased subjects.

2 A Okay.

3 Q Do you agree with that?

4 A Yes.

5 Q Did you have that issue to deal with in your
6 study?

7 A If it was in the Hansen study, it was also
8 here.

9 Q Okay. In this study all living cohort
10 members were asked to answer a detailed questionnaire
11 on lifetime exposures, and spouse and colleagues of
12 deceased subjects were interviewed using the same
13 questions. Is that the Danish questionnaire that we
14 have as Exhibit 1, or 3? I can't remember.

15 MR. SCHACHTMAN: I think it's 1.

16 A Yes.

17 MR. SCHACHTMAN: Or 3.

18 Q Then it says: An attempt has been made to
19 assess the magnitude of this bias. Two years after
20 the primary data collection a hundred and eighteen
21 cohort members who answered the questionnaire had
22 died.

23 A Umh-humh.

24 Q Spouses and colleagues were then interviewed
25 using the same questions to validate the accuracy of

1 exposure information obtained from surrogate
2 responses.

3 A Umh-humh.

4 Q Comparison of answers showed a fairly high
5 level of concordance on smoking habits, spouses, and
6 the basic questions on occupational exposures. The
7 nonwelders were classified correctly, but the
8 sensitivity of correct, quote, welder, closed quote,
9 classification was rather low. This misclassification
10 might result in an underestimation of the relative
11 risk by a factor of at least zero-point-five to zero-
12 point-eight in the exposed group in the present study,
13 the present study being Hansen 1996.

14 A Umh-humh.

15 Q What, if anything, does that indicate to
16 you?

17 A You know, actually, this is not surprising
18 at all. I did a study of occupational exposures and
19 looked at surrogate responses and people who had died
20 to see how reliable they were to what the actual
21 people reported, and they're not reliable at all. So
22 his finding is consistent with what's in the
23 literature, that the best information you can get
24 about occupations is from the individuals themselves,
25 surrogates just don't know.



1 Q Okay. And what, if any, impact did it have
2 on his study or your study?

3 A Given that, I don't think it had any impact.

4 Q Okay. And with respect to this study by
5 Hansen, which would be your study, was there missing
6 data in surrogate interviews utilized?

7 A There were surrogate interviews utilized.

8 Q Do you agree with his statement here at the
9 bottom of the left-hand column: Due to the higher
10 proportion of missing data in the surrogate
11 interviews, the case referent analysis is expected to
12 result in estimates biased toward the null?

13 MR. SCHACHTMAN: Objection to form.

14 A I'm not -- I'm reading this out of context,
15 but I think he's referring to a different study, the
16 Lordson and Hansen study, it's a nested case reference
17 analysis.

18 MR. SCHACHTMAN: You have to read the
19 sentence above it to see what he's referring to.

20 MR. CROSBY: Let me show you what we'll
21 marked as Exhibit 10.

22 (Deposition Exhibit No. 10 was marked for
23 identification and was attached to the transcript.)

24 BY MR. CROSBY:

25 Q And where was the nested cohort taken from?



1 A Within the -- within this cohort.

2 Q Have you seen Exhibit 10 before, Lung Cancer
3 Mortality in Stainless Steel and Mild Steel Workers:
4 A Nested Case slash -- or dash, Reference Study?

5 A Yeah, I've not read this before.

6 Q So you don't -- or do you have an opinion or
7 view as to whether or not it would yield any
8 information with respect to any bias towards the null
9 in Hansen's cohort, which is also your cohort?

10 A Yeah, I have no idea how it would affect the
11 results.

12 Q If it affected it by point-five to point-
13 eight in a relative risk, would we, for example, take
14 Column 2, Parkinson's disease, observed twenty-five on
15 Table 2, and the SHR from one-point-zero with a
16 confidence interval, and if we add point-five would it
17 change the rate or the range from zero-point-seven to
18 one-point-two and from one-point-five to two-oh?

19 MR. SCHACHTMAN: Objection; form and
20 foundation.

21 A His, his statement was about lung cancer,
22 and this is Parkinson's disease. I'm not aware of any
23 incidence where you'd try to look at two different
24 diseases in that aspect.

25 Q Yeah. But his is also dealing with the fact



1 that the information is not that reliable.

2 MR. SCHACHTMAN: Objection to form.

3 Q And it's from the same cohort, right?

4 MR. SCHACHTMAN: Objection; form.

5 A I disagree.

6 Q Why do you disagree?

7 A I believe the information is reliable.

8 Q Because?

9 A Given all the information we have from the
10 Danes, it's, it's -- we were able to identify who were
11 welders and who were not.

12 Q But isn't the person who was involved in
13 doing the first identification process expressing his
14 concern and doubts about that very aspect?

15 MR. SCHACHTMAN: Objection; form and
16 foundation.

17 A He's expressing doubts in one unique
18 situation.

19 Q But it says that it biases toward the null,
20 nevertheless, correct?

21 MR. SCHACHTMAN: Objection; form and
22 foundation.

23 A His statement says that it biases toward the
24 null, for lung cancer.

25 Q Well, lung cancer was diagnosed -- didn't



1 they use the same system you all did?

2 A No.

3 Q What did they do?

4 A They have a cancer registry that started in
5 1945.

6 Q Oh. So they have a system that just
7 identifies that specific disease?

8 A Absolutely.

9 Q They don't have that for Parkinsonism, do
10 they?

11 A They don't.

12 Q And lung cancer, unlike a movement disorder,
13 that one, when you get diagnosed with it, that's going
14 to usually get primary diagnosis, top billing on it,
15 won't it?

16 A I don't know.

17 Q If you went to a doctor and you had a
18 cancer, would you think that if you were hospitalized,
19 that it would be the primary diagnosis?

20 A You know, I'm not a nosologist, so I'm not
21 sure how they would put it.

22 Q What is a nosologist?

23 A Someone who classifies diseases.

24 Q And, generally speaking, is a nosologist
25 someone like, who has an undergraduate degree?



1 A I have no idea.

2 Q So you don't know about nosologists?

3 A I know they're important.

4 Q Is there anything in your study that in your
5 view indicates that you have any biases toward the
6 null as a result of the cohort you selected?

7 A I have no indications of that.

8 Q Is there anything in your calculations that
9 indicate that there is a bias toward the null in your
10 study?

11 A Not to my knowledge.

12 Q Or in the calculations?

13 A Not to my knowledge.

14 Q Is there anything in your study that in your
15 opinion indicates that any of your data are incorrect
16 or unreliable in any respect?

17 A No.

18 Q So in your opinion - and tell me if I'm
19 wrong, I'm sure you will - your study does a good job
20 of saying -- or determining exactly what you say it
21 determines, and that is that there is not an increased
22 incidence of hospitalizations of Parkinson's disease
23 by stainless steel and mild steel welders in Denmark?

24 A Yes.

25 Q And do you agree with the last sentence

1 before the conclusions? I take it you wrote it.

2 MR. SCHACHTMAN: Objection to form.

3 A Okay.

4 Q Well, let's -- since there was an objection,
5 let me back up.

6 At the top of Page 15 --

7 A Umh-humh.

8 Q -- exposure levels in the Danish industry
9 may have been higher in the 1950s and 1960s. That
10 follows a statement that says that you didn't know any
11 of the welding exposure levels for these workers,
12 correct?

13 A Right.

14 Q We don't know if they welded all day long or
15 if they welded just every now and then?

16 A Right.

17 Q And we don't know what the conditions were
18 when they welded?

19 A Correct.

20 Q Then the next is: The welders in our cohort
21 may have been less exposed because exposure levels are
22 lower in stainless steel welding and high level
23 exposure environments like shipyards were left out of
24 the cohort.

25 A That's what the statement says.



1 Q Okay. Did you write that?

2 A No.

3 Q Who wrote that?

4 A Doctor Bonde.

5 Q And then the next statement is: Therefore,
6 rates for PD found for welders in the present study
7 may not necessarily be representative for welders
8 exposed to higher levels of welding fumes and during
9 occupational conditions different from those in
10 Denmark. Did you write that?

11 A No.

12 Q Doctor Blot did?

13 A No. Doctor, I'm sorry, Bonde, B-O-N-D-E.

14 Q Oh, Bonde. So the portion dealing with --
15 where does Doctor Bonde's portion start?

16 A Again, I'm assuming that he's the one that
17 wrote it. As I stated before, the Danish colleagues
18 submitted all their comments together. And I think
19 it's the bottom of Page 14, that paragraph there.

20 Q How many people have died from the time that
21 Doctor Hansen's study was published until you all did
22 yours?

23 A I have no idea.

24 Q What effort, if any, did you all undertake
25 to look at cause of death in those that died?



1 A That, that wasn't out an outcome that we
2 were interested in in our study.

3 Q Did you all undertake any effort to do a
4 follow-up to see whether any of those people who had
5 died had had a hospitalization for any of the diseases
6 that you were studying?

7 A No.

8 MR. CROSBY: Your Declaration in this, which
9 I will mark as 11.

10 (Deposition Exhibit No. 11 was marked for
11 identification and was attached to the transcript.)

12 MR. SCHACHTMAN: Do you have an extra copy
13 of the Lauritsen paper that you marked? If you don't,
14 I'll make a copy.

15 (Mr. Crosby handing.)

16 MR. SCHACHTMAN: Thanks.

17 MR. CROSBY: My friend just reminded me of
18 something. Do you have the proposal? I can't
19 remember what its number was.

20 MR. SCHACHTMAN: 5. The Danish proposal,
21 or --

22 MR. CROSBY: The Danish proposal.

23 (Witness handing.)

24 BY MR. CROSBY:

25 Q This Declaration that you prepared that



1 we've marked now as Exhibit 11?

2 A Umh-humh.

3 Q In Paragraph 3 --

4 A Okay.

5 Q -- it says: This large study of welders
6 with long-term follow-up provides evidence that there
7 is no moderate or strong association between welding
8 and measures of morbidity for Parkinson's disease,
9 Parkinsonism, and other neurological conditions.

10 Would you explain to me what that means in
11 just plain terms?

12 A Yeah. We looked at the hospitalizations,
13 the standardized hospitalization rates among welders
14 for Parkinson's disease, Parkinsonism, and other
15 neurological conditions, and none of them --

16 MR. SCHACHTMAN: Hello. On the phone there,
17 if you could turn down your music, that would be
18 great.

19 A -- and none of them were statistically
20 significantly increased.

21 Q In your opinion, does your study conclude
22 that welding fume exposure does not cause
23 Parkinsonism?

24 A Our study concludes that people who worked
25 as welders are not at an increased risk for being



1 hospitalized for Parkinson's disease.

2 Q So your study's limited to exactly what it
3 says in that portion we discussed at the very end?

4 A Yes.

5 Q Would it be fair to take it beyond that?

6 A Beyond the conclusions that we wrote, no.

7 Q Yeah.

8 Is there a pharmacological registry in
9 Denmark?

10 A Yes.

11 Q Is there one in Sweden?

12 A Yes.

13 Q So if you got these people's secret code
14 number and you want to, can you find out all the
15 prescriptions that they've had?

16 A Yes.

17 Q If someone had been diagnosed with a
18 movement disorder for which there is a medication
19 available and it's prescribed, would the Danish system
20 pick it up?

21 A It would, but only to a small extent. The
22 prescription database in Denmark is only in one
23 county, Aarhus County, which is one small section of
24 the country, it's not a nationwide registry, so we
25 wouldn't get all the information about all the welders

1 in our study. And our registry only started in '89, I
2 believe.

3 Q Okay. And if you had that data, would it
4 help with doing an analysis of how many people, if
5 any, may have been missed by the hospital or a clinic
6 process?

7 A We can look to see who was prescribed
8 specific information -- or specific prescriptions.

9 Q And what about the Swedish pharmaceutical or
10 pharmacy registry?

11 A I believe that began either last year or is
12 beginning this year.

13 Q Are neuropsychological conditions codable
14 under the ICD?

15 A The ones that we've classified in the paper
16 are. We present the ICD codes with them.

17 Q Are any of those neuropsychological?

18 MR. SCHACHTMAN: Are you asking about
19 neuropsychological diseases, or --

20 MR. CROSBY: Conditions.

21 MR. SCHACHTMAN: Conditions.

22 A Yeah.

23 Q Which ones?

24 A I'm sorry. These are -- these are the
25 diseases we were able to look for in the registry.

1 Q Okay. Are any of those conditions, in your
2 opinion, consistent with the neuropsychological
3 diagnosis of ICD?

4 A I don't know.

5 Q Are there other neurological conditions or
6 diseases that can be caused by occupational exposure
7 that are not on your ICD list in the proposal?

8 A I have no idea.

9 (Mr. Gonzalez-Magaz left the deposition.)

10 Q Who came up with that list?

11 A Doctor Blot.

12 Q With respect to your Declaration --

13 A Umh-humh.

14 Q -- when is the last time you reviewed it?

15 A Probably December.

16 Q Did you have any suggestions or changes at
17 that time?

18 A No.

19 Q Do you have any at this time?

20 (Witness reviewing document.)

21 A No.

22 THE VIDEOGRAPHER: I think now would be a
23 good time to change the tapes.

24 MR. CROSBY: Okay.

25 THE VIDEOGRAPHER: Here ends Tape No. 3 in



1 the deposition of John P. Fryzek, Ph.D. We are going
2 off the record. The time is 5:09 p.m.

3 (A short recess was taken.)

4 (Mr. Kelly left the deposition.)

5 THE VIDEOGRAPHER: Here begins Tape No. 4 in
6 the deposition of John P. Fryzek, Ph.D. We are back
7 on the record. The time is 5:17 p.m.

8 BY MR. CROSBY:

9 Q Doctor, your study that you've got in press,
10 does it exclude a relative risk of two for the
11 incidence of Parkinson's disease or Parkinsonism in a
12 population of welders exposed to welding fumes?

13 MR. SCHACHTMAN: Objection; compound.

14 A Our study excludes a relative risk of two
15 for the instance of hospitalization due to Parkinson's
16 disease in welders.

17 Q In Denmark?

18 A In Denmark.

19 Q Does it exclude a relative risk of two for
20 the instance of Parkinson's disease occurring in a
21 population of welders in the United States?

22 A No, it does not.

23 Q Does it exclude -- does the study exclude a
24 relative risk of two or greater for Parkinsonism of
25 welders in the United States?

1 A No.

2 (Mr. Thompson left the deposition.)

3 Q Welders anywhere?

4 A For?

5 Q Parkinson's disease, Parkinsonism.

6 A It excludes a risk of two or greater for
7 Parkinson's -- hospitalizations due to Parkinson's
8 disease in Denmark.

9 Q And that's it?

10 A Yes.

11 Q So as to relative risk for the incidence of
12 Parkinson's disease or Parkinsonism of welders in the
13 United States, it remains unaddressed in this study?

14 A I'm not sure what the exposure levels of
15 welders are in the U. S. compared to Denmark, but if
16 they're similar exposure, then it could exclude a risk
17 of two or greater in the U. S. as well.

18 Q But that would be limited to
19 hospitalizations, wouldn't it?

20 A Exactly.

21 Q Your study, even if exposures in the U. S.
22 are the same as exposures in Denmark, does not exclude
23 a relative risk of two or greater for the incidence of
24 Parkinson's disease or the incidence of Parkinsonism
25 in welders exposed to welding fumes; is that correct?

1 A It excludes the risk for hospitalization,
2 correct.

3 Q I'm not asking about hospitalization.

4 A Umh-humh.

5 Q So that word's not in my question.

6 A Okay.

7 Q So my question to you is does your study
8 exclude a relative risk of two or greater for the
9 incidence of Parkinsonism in a population of welders
10 exposed to welding fumes in the United States?

11 A No.

12 Q Does your study exclude a relative risk of
13 two or greater for any neurological condition in
14 welders exposed to welding fumes in the United States,
15 the incidence of that disease or condition?

16 A It looks at the incidence of
17 hospitalizations for those diseases.

18 Q Right. And I'm not asking about
19 hospitalizations.

20 A Right.

21 Q I'm asking about the incidence or the
22 occurrence of the disease.

23 A The study was not designed to look at that.

24 Q Is the Swedish study designed to do that?

25 A The Swedish study is still undergoing

1 approval, so I'm not sure of the final design of that
2 study.

3 Q So if I asked a lot of questions about the
4 Swedish study, would that mean that it might all be
5 changed?

6 A Yeah.

7 Q Right after we leave the room, couldn't it?

8 A I, I have no idea yes or no.

9 MR. SCHACHTMAN: You could have a creative
10 input.

11 MR. CROSBY: I'm trying.

12 BY MR. CROSBY:

13 Q Could we look at Doctor Louis' Declaration,
14 please? Actually, I think you were going to also
15 comment on Doctor Wells'; am I right?

16 A If you want me to.

17 Q I don't know that I want you to, but if you
18 might while we're in hearing, then I want to learn
19 about it. That's one of the purposes of this process.

20 A Okay.

21 Q Do you have Doctor Wells' report?

22 A No.

23 Q Do you recall what it was that he had to say
24 about your paper with which you take issue?

25 A I don't recall specifics.



1 Q Well, while I'm looking for that, while you
2 haven't done a calculation with respect to power in
3 this 2004 Danish study for the industry, that is
4 something that you do customarily and from time to
5 time in other papers that you publish; am I correct?

6 MR. SCHACHTMAN: Objection; foundation.

7 A I have never published a power calculation
8 in any of the papers that I've written.

9 Q Do you recall whether or not Breslow & Day
10 address power calculations?

11 A I don't recall what they say.

12 Q Is that an authoritative work, the arc
13 monograph?

14 A What specific one are you asking about?

15 Q The one that you've cited in your paper. I
16 can't remember, is it your paper, or your Declaration?
17 I think it's your Declaration. The first one
18 (handing).

19 A Okay. Yes. This, this describes
20 epidemiological research analysis, yes.

21 Q And that's one of the things that you rely
22 on in performing epidemiological --

23 A It describes --

24 Q -- research and analysis?

25 A Yeah, it describes standardized techniques.

1 Q And is it reliable and authoritative in your
2 opinion?

3 A In my opinion, yes.

4 Q Are all of the works that you have listed as
5 attached to your Declaration reliable and
6 authoritative in your opinion? And I can't remember
7 them all. You might look. I'm not trying to --

8 A Yeah. Yes, I agree they're all reliable and
9 authoritative.

10 MR. CROSBY: Do you happen to have a copy of
11 Wells?

12 MR. SCHACHTMAN: No. I actually never gave
13 him a copy of Wells.

14 MR. CROSBY: Oh.

15 MR. SCHACHTMAN: I mean we talked about what
16 Wells said, but I never showed him Wells.

17 BY MR. CROSBY:

18 Q So is it your understanding, then, that your
19 concerns about -- do you have concerns about what
20 Doctor Wells was reported to have said about your
21 study?

22 A I can't recall specifically what he said.
23 If you give me specifics I'll tell you if I agree or
24 not.

25 Q Well, if I can find the file folder where I



1 put it in.

2 MR. SCHACHTMAN: I've got it on my laptop,
3 if that helps.

4 MR. CROSBY: Which one is it?

5 MR. SCHACHTMAN: He, too, has two
6 Declarations, and I think we discussed the December
7 2004 Declaration.

8 MR. CROSBY: I only have one copy of that.

9 BY MR. CROSBY:

10 Q But this is a statement that is -- and see
11 if this rings a bell. And Fryzek -- am I saying your
12 name right?

13 A You're saying it perfect.

14 Q Thank you. In Fryzek et al., 2004, the
15 power to detect rate of occurrence of the number of
16 welders with PD under the alternative hypothesis, that
17 is, fifty percent, and a hundred percent larger than
18 the occurrence of the number of welders with PD
19 yielding five observed cases of PD are zero-point-two-
20 two-six and zero-point-five-two-six respectively, the
21 power in Fryzek, et al. is quite low relative to the
22 large magnitude of the difference one is trying to
23 detect.

24 I'll give it to you, but, first, while it
25 was long, do you have it enough in your mind to know



1 whether or not you agree with it or disagree with it?

2 A I need to read it.

3 Q Sure. I'll give it to you. But let me ask
4 you this.

5 The alternative hypothesis, what does that
6 mean?

7 A I need to see it in context to see what he's
8 saying.

9 Q Okay (handing).

10 (Witness reviewing document.)

11 A Okay. What is your specific question?

12 Q My question is have you now read that?

13 A Yes.

14 Q Do you agree or disagree with it, or do you
15 know whether or not the information contained therein
16 is accurate with which you could agree or disagree?

17 A I'm not clear how he did his power
18 calculation.

19 Q If he correctly performed his power
20 calculation and his numbers are correct, what does
21 that mean to you?

22 A Doing a power calculation after you have the
23 point estimate and the confidence interval around a
24 measure doesn't really mean much to me.

25 Q But what would it mean if you didn't have a

1 confidence interval and what you saw was what is there
2 as to the power calculation, what would it mean to you
3 as to what your study would reveal if those were the
4 results of such a calculation?

5 A If, if I, I did a study I would, I would
6 never only present the power calculation. I'd present
7 the ninety-five percent confidence interval and the
8 point estimate.

9 Q Okay. But assume that you don't. Assume
10 you didn't do it, assume some other body, some other
11 human being did it and that's what they presented.

12 A Umh-humh.

13 Q If you saw that as the power calculation,
14 what would it mean to you as to the strength of their
15 results?

16 MR. SCHACHTMAN: Objection to form.

17 A Without the, the point estimate and the
18 ninety-five percent confidence interval, it wouldn't
19 mean much to me at all.

20 Q Assuming that we have your point estimate
21 and your ninety-five percent confidence interval and
22 you have that power calculation, what does it tell you
23 about your study?

24 A With my study, with the point estimate and
25 ninety-five percent confidence interval, it actually

1 tells you the magnitude of risk that you can detect in
2 the study, and that our study can actually exclude
3 risks greater than one-point-five, and that our best
4 estimate of what the risk is given the point estimate
5 is zero-point-nine.

6 Q And does that power calculation in any way
7 impact the weight to which one would give your
8 numbers?

9 A Not at all.

10 Q So what would the power calculation
11 accomplish?

12 A In my opinion, nothing.

13 Q Why would anybody do it?

14 A I don't know.

15 Q It doesn't assist in assessing the strength
16 of the study?

17 MR. SCHACHTMAN: Objection; form.

18 A The confidence interval is a much better
19 measure of the strength association.

20 Q I understand. But just like this gentleman
21 has a videotape and a digital machine, does it give
22 some kind of confirmation or clue that there is
23 something else going on or that the study is strong as
24 new rope or that the study is weak?

25 A If, if I saw a power calculation along with



1 the ninety-five percent confidence interval and the
2 point estimate, the power calculation would not offer
3 me any new information.

4 Q Okay. What if you had the point information
5 but no ninety-five percent confidence interval?

6 A I can't imagine a case where that would be.

7 Q What if you had a P factor as opposed to
8 ninety-five percent confidence interval and the P
9 factor was zero-point -- greater than zero-point-one-
10 zero?

11 MR. SCHACHTMAN: P value?

12 Q P value. I keep saying factor, I'm sorry.
13 Would that tell you anything?

14 A Can you say it again? I got focused on
15 factor.

16 Q If there was a P value --

17 A Umh-humh.

18 Q -- of greater than zero-point-one-zero --

19 A Umh-humh.

20 Q -- and those power calculations and your
21 SHRs, what, if anything, would it reveal to you?

22 A Well, that P value would be more powerful
23 because it was actually based on the data. These
24 power calculations are based on some assumptions and
25 other calculations that I have no knowledge how those

1 were created.

2 Q What assumptions would someone have to make?

3 A The estimate of the rate of the disease and
4 the population that you're studying and then the
5 background population.

6 Q And is that information --

7 A And other --

8 Q -- unavailable?

9 A Prior to a study it is. Prior to our study
10 of Parkinson's disease it was unavailable.

11 Q Okay. If he used your numbers from your
12 study, what would it tell you?

13 A You know --

14 MR. SCHACHTMAN: Objection; foundation.

15 A Again, I'm just -- I have no idea how he's
16 done the calculations without telling me the formulas
17 he's used and the assumptions he's made.

18 Q Okay. Could I have that back?

19 A Umh-humh (handing).

20 Q That was from the --

21 MR. SCHACHTMAN: December 2004.

22 Q December 2004, the last two sentences of the
23 paragraph numbered 17.

24 I think we both have copies of the
25 Declaration of Doctor Louis.

1 A Yeah. I don't have a copy with me, but I've
2 seen it.

3 MR. SCHACHTMAN: We made some copies
4 (handling).

5 Q Did you read all of Doctor Louis'
6 Declaration?

7 A No. Only the parts that pertained to me.

8 Q Do you recall any parts that pertained to
9 you other than what's contained in Paragraph 33 on
10 Pages 23 and 24 --

11 A No --

12 Q -- and Page -- and Paragraph 35, did you
13 look at Paragraph 35 on Page 25?

14 A Yeah.

15 Q Let's look at that one first, because it's
16 sort of the Paragraph 35.

17 A Paragraph 35, okay.

18 Q One study, paren, Fryzek, unpublished, paren
19 closed, uses a cohort design which is its major
20 strength, but the study also has several serious
21 weaknesses. As enumerated above, these increase the
22 likelihood that the study makes a type one error.
23 What is a type one error?

24 A The type one error is that if you find --
25 the likelihood that the positive results you found is,

1 is actually not positive, a false positive.

2 Q Do you agree with that statement?

3 A No.

4 Q Why do you disagree?

5 A Because we didn't find a positive
6 association.

7 Q And with respect to Paragraph 33.

8 A Okay.

9 Q Do you have a general observation about the
10 comments made in Paragraph 33?

11 A I don't have a general observation.

12 Q Okay. And starting with that, it says: In
13 a recent study by Fryzek, paren, unpublished, closed
14 paren, of a cohort of Danish welders, some of whom
15 developed PD, the author studied the risk of
16 hospitalization for PD among welders compared to the
17 risk of hospitalization for PD in the Danish
18 population. The major strength of this study is its
19 cohort design. The authors conclude that the rates
20 for hospitalization for PD were not elevated among
21 welders. The study is problematic for the following
22 reasons. No. 1: First they studied rates of
23 hospitalizations for PD rather than rates of
24 occurrence for PD.

25 Do you agree with that, that that's a



1 problem?

2 A I don't agree it's a problem, but I agree
3 that's what we did.

4 Q Okay. Would the study be better if it could
5 be designed to detect occurrences of PD as opposed to
6 hospitalizations?

7 A I'm not sure.

8 Q Okay. Well, you were using
9 hospitalizations, I guess, as an effort for some form
10 of a surrogate for occurrence, right?

11 A Right.

12 Q The problem with hospitalizations with the
13 surrogate is that it doesn't pick up the early cases,
14 right?

15 A Umh-humh.

16 MR. SCHACHTMAN: You have to say yes or no.

17 A I'm sorry. Yes. I'm sorry.

18 Q It's getting late, we're all forgetting it.

19 I'm sorry.

20 A I apologize.

21 Q Are you too tired to go ahead and --

22 A No, I'm okay.

23 Q All right. Do you agree that this -- then
24 the study would probably only assess severe cases of
25 PD?

1 A It would only assess hospitalizations of PD.

2 Q Okay. Do you agree with his rationale to
3 support his view that the incidence of PD among
4 individuals sixty-five and older supports his position
5 that it was assessing only severe cases?

6 A I, I have no knowledge what he's basing his
7 statement on.

8 Q Well, do you agree that what he provides
9 there is confirmation for his view that it's assessing
10 severe cases is a valid and rational confirmation
11 methodology?

12 A I don't see that he has any estimates of
13 Parkinson's disease in Denmark. So I don't know.

14 Q Well, isn't he using your figures, in the
15 first portion?

16 A Right. But he's comparing it to populations
17 in New York and Spain.

18 Q And so is that not cricket?

19 A Pardon?

20 Q Is that not cricket, that's not legitimate
21 or fair?

22 A Diseases vary across populations.

23 Q From one country to another?

24 A From one geographic location to the next.

25 Q Second, they excluded shipyard workers, a

1 group of individuals who have potential heavy exposure
2 to manganese through welding, creating a second
3 systematic bias. Do you agree with that?

4 A No.

5 Q You don't agree that it creates a systemic
6 bias?

7 A No.

8 Q Did it create any kind of issues,
9 limitations, or weakness?

10 A It limited what we could say about
11 hospitalization of Parkinson's disease for shipyard
12 workers.

13 Q And, third, is they showed that smoking was
14 an important protective factor for PD. Did you all
15 include smoking as a co-variant in the statistical
16 model?

17 A We looked at the effect modification of
18 smoking and we did a stratified analysis.

19 Q Did you include smoking as a co-variant in
20 your statistical model?

21 A By doing a stratified analysis we have
22 controlled for it.

23 Q So then he is wrong when he says that you
24 did not include smoking as a co-variant in your
25 statistical model?

1 A I am not sure what statistical models he's
2 talking about.

3 Q So are you saying he's wrong, or are you
4 saying you're not sure what he's saying?

5 A I'm not sure what he's saying.

6 Q Now, he acknowledges that you stratified it,
7 correct?

8 A Right.

9 Q Do you agree with his assessment that the
10 risk of PD is nearly two times higher in welders than
11 in nonwelders, although the numbers are small in the
12 smoking population?

13 A No, I, I don't agree with that.

14 Q What did Table 3 show concerning that?

15 A That they're not statistically different.

16 Q On Table 3, nonsmokers, am I understanding
17 this correctly?

18 A I got it. Sorry.

19 Q Plaintiff's 8? It's the very last page.

20 A Okay.

21 Q It shows smoking, nonsmokers, your SIR is
22 one-point-nine-oh with a ninety-five percent CI of
23 zero-point-three-eight to five-point-five-four?

24 A Right.

25 Q That indicates that you're well beyond two,

1 doesn't it?

2 A No, no. What that's showing is that --

3 Q It can be, I'm sorry.

4 A No -- well, it can be.

5 Q Okay.

6 A But what it's showing is that across the
7 categories of smoking the point estimates aren't
8 statistically different. You can see that by the
9 confidence intervals. The confidence intervals
10 overlap, and the numbers contain all the point
11 estimates. And also the trend is not significant.

12 Q Is the trend increasing with age?

13 A I'm sorry. The trend is for smoking, from
14 nonsmokers to former smokers to heavy smokers.

15 Q I understand.

16 A So when you look across those groups you
17 don't see a decrease in Parkinson's disease, a
18 statistically significant decrease.

19 Q But is there a trend in age in the tables
20 that provide age?

21 A No.

22 Q Is there an indication of a trend with
23 respect to age?

24 A For, for age it appears that the rate of
25 hospitalizations for Parkinson's disease goes down for

1 those aged sixty-five years or older.

2 Q And do you know the age of the people who
3 had died?

4 A We know the ages, yes.

5 Q Did you include that in the table, in any of
6 the tables?

7 A They're included in all the tables.

8 Q Okay. But do we know how many of -- what
9 percentage of those people who died had Parkinson's
10 disease?

11 A No.

12 Q With a ninety-five percent confidence
13 interval that gives a range that is less than one but
14 greater than two -- or, excuse me, anywhere from less
15 than one to greater than two, such as the point-three-
16 eight to five-point-five-four --

17 A Umh-humh.

18 Q -- does that indicate that the risk could be
19 as high as five times?

20 A Yes, but it could also be as low as point-
21 three-eight.

22 Q Right. And with respect to the duration of
23 time spent welding table --

24 A Umh-humh.

25 Q -- less than ten years, is your confidence

1 interval point-two-four up to two-point-two-eight?

2 A Yeah.

3 Q So it could be as low as point-two-four and
4 it could be more than doubled?

5 A Right.

6 Q And with respect to ten to twenty years, it
7 could be as low as point twenty-two or it could be
8 more than tripled?

9 A Yes.

10 Q More than twenty years it could be as low as
11 point-twenty-one and almost doubled?

12 A Right.

13 Q And for attained age less than sixty-five it
14 could be as low as point-three-six and as high as two-
15 point-six-three?

16 A Umh-humh.

17 Q And under your calendar time, seventy-seven
18 to ninety-two, as low as point-twenty-one and as high
19 as doubled?

20 A Yes.

21 Q So these -- this doesn't rule out a relative
22 risk of two overall, does it?

23 MR. SCHACHTMAN: Objection; form and
24 foundation.

25 A This looks at various categories of disease.



1 Q And, generally speaking, would most of them
2 capture a two or greater --

3 MR. SCHACHTMAN: Objection; form.

4 Q -- in their confidence interval?

5 MR. SCHACHTMAN: Objection; form. Actually
6 and foundation.

7 MR. CROSBY: Fine.

8 A Some do and some do not.

9 Q Did you agree that, in summary, this study
10 that I'm looking now at, Doctor Louis --

11 A Okay.

12 Q -- this study has an important strength as a
13 cohort study, but also several important limitations,
14 failure to assess occurrence rather -- excuse me,
15 failure to assess occurrence of rather than
16 hospitalizations? It's sort of a repeat of what we've
17 talked about before. Has your opinion changed?

18 A No.

19 Q Doctor, since you're under oath, I'll ask
20 you a question that I would probably ask you even if
21 you were not under oath, but this way I know I'm going
22 to get it straight.

23 A Okay.

24 Q Your study on the Danish welders --

25 A Umh-humh.



1 Q -- what's the part that you just are most
2 uncomfortable about insofar as its design or its
3 presentation or its results?

4 A There's no part. It's a very well designed
5 study. It follows standardized epidemiological
6 methods. The results are, are published in an
7 understandable manner. I think it's clearly written.
8 I have no concerns about it.

9 Q Okay. And you don't find anything about it
10 that makes you uncomfortable with any kind of flaws or
11 not intended biases, just biases that occur
12 confounding factors, anything like that?

13 A No.

14 Q So have you got your dream study here?

15 A I don't think I defined my dream study.

16 Q Well, I know, but you've got one here, as I
17 understand --

18 A My dream study was a randomized controlled
19 trial, and I don't have that.

20 Q Well, I know. Unfortunately, while some of
21 the folks you work with, not your co-employees, but
22 that you consult for may engage in that activity. You
23 don't, do you?

24 A What activity? I'm sorry.

25 Q Exposing people to something without knowing

1 what it's going to do to them.

2 A I --

3 MR. SCHACHTMAN: Objection; foundation,

4 form.

5 A I have never done that, no.

6 Q Okay. And that's not a good thing to do, is

7 it?

8 MR. SCHACHTMAN: Objection; form.

9 A It depends on the circumstances.

10 Q Well, if you're going to put a product out
11 on the marketplace, wouldn't you want to know before
12 you put it out whether or not it would cause problems?

13 A That's why clinic -- randomized clinical
14 trials are done.

15 Q Could you do something like that with
16 respect to welding rods?

17 A I have no knowledge of that.

18 Q Could you have done something with respect
19 to welding rods or welding fumes to find out whether
20 or not it was going to pose a hazard to the health of
21 human beings before you put them out in the general
22 marketplace?

23 A I have no knowledge of that at all.

24 Q Are you familiar with animal studies?

25 A Limited.



1 Q Are you familiar with the chemical
2 components of welding fumes?

3 A I can't name them for you, but I realize
4 there are some.

5 Q And are you familiar that some of those
6 components of those fumes pose a potential health risk
7 in human beings?

8 A I don't know what those components are.

9 Q If manganese, or manganese oxide is one of
10 those components, is manganese capable of causing
11 disease in human beings?

12 MR. SCHACHTMAN: Objection; form and
13 foundation.

14 A It's my understanding it depends on the
15 circumstance of exposure.

16 Q That's pretty much true of everything, isn't
17 it?

18 A Absolutely.

19 Q It's kind of life.

20 A I don't know.

21 MR. CROSBY: Can we stop a second so I can
22 look at what I've got and see if we can stop?

23 THE VIDEOGRAPHER: We are going off the
24 video record. The time is 5:48 p.m.

25 (Discussion off the record.)



1 THE VIDEOGRAPHER: We are back on the video
2 record. The time is 5:57 p.m.

3 BY MR. CROSBY:

4 Q I can't remember, and I do apologize for
5 that, but it gets worse. So I'm tipping you off to
6 that part. Had you read Hansen's 1996 paper before?

7 A Which one was that? I'm sorry. Was that
8 the nest --

9 Q Exhibit 9.

10 A Was that the nested case control study?

11 Q Exhibit 9.

12 A Let me see. There was one I read and one I
13 hadn't read.

14 MR. SCHACHTMAN: And, Doctor Fryzek, can you
15 identify it by exhibit number?

16 MR. CROSBY: It's Exhibit 9.

17 THE WITNESS: Yes.

18 A I believe this is the one that I looked at.

19 BY MR. CROSBY:

20 Q Okay.

21 A Yeah.

22 Q Do you recall any other limitations Doctor
23 Hansen pointed out in his study with respect to his
24 cohort?

25 A I -- to be frank, I haven't read that

1 article for six months, so I don't know. I don't
2 recall.

3 Q Okay. Do you know if anybody had read this
4 article prior to the selection of that cohort for
5 purposes of the study that you undertook?

6 A I have no idea.

7 Q Looking at the Swedish study, I think you've
8 got a copy.

9 A Okay.

10 Q And I'm not going to be long, but I just
11 have a couple questions.

12 A Do you remember what number?

13 MR. SCHACHTMAN: 4.

14 Q 4.

15 A Okay. I have it.

16 Q Do you have an understanding as to the
17 purpose behind that study?

18 A Yes, I understand the purpose about the
19 study.

20 Q And what is the purpose?

21 A Is to look at the incidence of Parkinson's
22 disease and other neurodegenerative disorders in
23 Sweden, among Swedish welders.

24 Q Is there a reason to expedite this study, or
25 was there a reason to expedite the Danish study?



1 A Not to my knowledge.

2 Q Was there a reason to use the Danish cohort
3 in order to get the study done more quickly than if
4 you formulated your own cohort, or do you know?

5 A My understanding of the purpose of using the
6 Danish cohort, which I think is a good one, is that
7 they had gone through all the heavy work of
8 administering the questionnaires, identifying the
9 welding industries, and, and so we were able to build
10 off of that to examine Parkinson's disease.

11 Q And was another of the reasons that it would
12 allow the study to be performed quickly?

13 A I, I had no knowledge of how quickly the
14 study needed to be done or not.

15 Q Do you know whether or not there is a sense
16 of urgency with respect to the Swedish study?

17 A I don't know what the sense of urgency is on
18 the Swedish study.

19 Q You don't know one way or the other?

20 A No.

21 Q With respect to the documents that I've
22 shown you today that were either received or generated
23 by IEI or you, are those true and correct copies of
24 the documents that you either received or generated or
25 that IEI received or generated?



1 A You're talking specifically about the
2 exhibits?

3 Q Yes, sir.

4 A I believe so.

5 MR. CROSBY: Okay. It's a question of
6 authenticity, is all I'm trying to cover.

7 MR. SCHACHTMAN: I hope not, since I sent
8 you the documents.

9 MR. CROSBY: Well, okay.

10 BY MR. CROSBY:

11 Q Now, the Swedish study, you're going to
12 include -- what's the difference in the Swedish study
13 and the Danish study?

14 A One of the largest differences is there's
15 more welders in Sweden. It's a larger country.

16 Q Is there any particular subgroup or group
17 within the cohort that will be included that was not
18 included in the Danish study?

19 A Sure. People who worked in shipyards,
20 people -- welders who worked in shipyards.

21 Q Did you have anything to do with the design
22 of the study?

23 A No.

24 Q Do you know why shipyards are included in
25 this one?



1 A I don't know why.

2 Q Do you think -- or do you have any opinion
3 or view one way or the other as to what, if anything,
4 it may do to have that in the study?

5 A I have no knowledge of how that will affect
6 the study results.

7 Q Any other differences besides increased
8 population and shipyard welders?

9 A It's a different population.

10 Q So it may well be that the results from
11 Swedish welders will vary from the results of Danish
12 welders?

13 A Yes.

14 Q Do you have any rationale for why that could
15 occur?

16 A I, I don't.

17 Q So just some human -- the human beings in
18 Sweden may be different than the human beings in
19 Denmark?

20 A I, I have no idea what the study results
21 will be before I do the study.

22 Q Okay. But, I mean, I guess you'd have to do
23 it because you think that there is a chance or
24 likelihood that it will be different?

25 A That's not, not the reason for doing it.



1 Q Okay. What's the reason for doing it?

2 A In epidemiology one way to look at -- or one
3 method to examine disease associations is to look at
4 different populations and see if you find similar
5 results or not.

6 Q And will these data yield results that will
7 be limited to population of welders in Sweden?

8 A Yes.

9 Q Will it be hospitalization?

10 A I'm not sure at this point how exactly
11 they're going to ascertain the outcome.

12 Q In this study the price has gone up, is
13 expected to be two hundred and ninety-seven thousand,
14 four hundred dollars, if it's like this is?

15 A I assume so, yes.

16 Q And what's the projected length of time for
17 this study?

18 A The proposal says six to seven months.

19 Q And are you all starting this from scratch?

20 A Yes.

21 Q So you're going to start one from scratch
22 and be able to do it quicker than the one that you --
23 where you already had a cohort of convenience?

24 A No, it would be quicker.

25 Q How long was the project in Denmark?

1 A I'm not sure of the exact length of the
2 project.

3 Q Okay.

4 A And I don't know how long this one will
5 take, either. We haven't, haven't started.

6 Q Have you read Hansen's 1982 publication
7 dealing with --

8 A I don't know what you --

9 Q No, okay.

10 If one has a confidence interval in a paper,
11 does it make the number of cases and the number of
12 control irrelevant? Or does the confidence interval
13 that you calculate take that into consideration?

14 A The confidence interval does take into
15 consideration the population size.

16 Q How does it do that?

17 A A larger population will give a more precise
18 confidence interval.

19 Q Tighten the range?

20 A Yes.

21 Q Will it tell you how much more accurate it
22 is that it's within that range, or will it still be a
23 ninety-five percent confidence interval?

24 A It will still be a ninety-five percent
25 confidence interval.



1 Q Do the Danes consider sheet metal workers to
2 be welders, do you know?

3 A I'm not -- I'm not sure.

4 Q Are you familiar with the, any other causes
5 of Parkinson's disease or Parkinsonism from chemical
6 exposure?

7 A I am not familiar that there are any
8 established risk factors for Parkinson's disease other
9 than protective effect smoking.

10 Q In your opinion, do all epidemiological
11 studies require a control group?

12 A All epidemiological studies have a
13 comparison group.

14 Q Can it -- is it just so one is -- the
15 numerator comes from the denominator?

16 A I'm sorry?

17 Q Is it that the numerator should come from
18 the denominator?

19 A Yes.

20 Q And must the --

21 A No. I'm sorry, that's -- no, that's not
22 correct.

23 Q Okay. Correct me, then, please.

24 A I'm not -- I'm not sure what you're asking.

25 Q Do the people under study have to be part of



1 a larger group that's your denominator?

2 A It depends on your study design.

3 Q Can census data be a surrogate for control
4 group?

5 MR. SCHACHTMAN: Objection; form, overbroad.

6 A It depends what that data consists of.

7 Q Is there anything about your paper or your
8 opinions with respect to your paper that you have not
9 expressed?

10 A I think we've covered everything that I
11 wanted to express.

12 Q Do you have any opinions about what your
13 paper demonstrates or shows other than what is
14 expressed in the conclusions contained in the paper?

15 A No.

16 Q Have you been in the military?

17 A No.

18 Q You had service in the Peace Corps, I think?

19 A Yes.

20 Q Any other employment or affiliation with the
21 United States Government or any state government or
22 institution other than that?

23 A The State of Nebraska.

24 Q And what was your --

25 A I was assistant professor at the University

1 of Nebraska Medical School.

2 Q We talked about that.

3 A Yeah. Also, I received employment through
4 the National Cancer Institute; I had a grant as a
5 graduate student. And I received funding from the
6 University of Michigan, which is part of the State of
7 Michigan, in graduate school.

8 Q Have you ever had any employment within
9 industry?

10 A No.

11 Q So has your employment been limited to --
12 just give me a brief overview of your employment.

13 A Starting with what year?

14 Q College.

15 A In college I worked as a research assistant
16 for an endocrinologist who was studying osteoporosis
17 disease. Then I joined the Peace Corps and worked as
18 a teacher. And after that I went to graduate school,
19 and since then I have worked as an epidemiologist.

20 Q And who have been your various employers?
21 Is that reflected on your CV.

22 A It is.

23 Q Yeah.

24 A Would you like me to state them again?

25 Q No, that's quite all right.



1 Have you ever been terminated from any
2 employment?

3 A No.

4 Q Have you ever resigned under duress?

5 A No.

6 Q And are you still refusing to provide the
7 information with respect to your income from IEI
8 and/or Vanderbilt?

9 A Yes.

10 MR. CROSBY: That's all that I have. Thank
11 you.

12 MR. SCHACHTMAN: Thank you, Doctor.

13 THE VIDEOGRAPHER: Here ends the videotape
14 deposition of John P. Fryzek, Ph.D. The number of
15 tapes used today was four. We are going off the
16 record. The time is 6:12 p.m.

17 (Signature having not been waived, the
18 deposition of Jon Peter Fryzek was concluded at 6:12
19 p.m.)

20

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ACKNOWLEDGMENT OF DEPONENT

I, Jon Peter Fryzek, do hereby acknowledge

1 that I have read and examined the foregoing testimony,
2 and the same is a true, correct and complete
3 transcription of the testimony given by me and any
4 corrections appear on the attached Errata sheet signed
5 by me.

6

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(DATE)

(SIGNATURE)

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1 CERTIFICATE OF SHORTHAND REPORTER - NOTARY PUBLIC

2 I, Beatriz D. Fefel, Registered Professional
3 Reporter, the officer before whom the foregoing
4 proceedings were taken, do hereby certify that the
5 foregoing transcript is a true and correct record of
6 the proceedings; that said proceedings were taken by
7 me stenographically and thereafter reduced to
8 typewriting under my supervision; and that I am
9 neither counsel for, related to, nor employed by any
10 of the parties to this case and have no interest,
11 financial or otherwise, in its outcome.

12 IN WITNESS WHEREOF, I have hereunto set my
13 hand and affixed my notarial seal this 9th day of
14 February 2005.

15 My commission expires:

16 August 1, 2008
17

18 _____
19 NOTARY PUBLIC IN AND FOR THE
20 STATE OF MARYLAND
21 -----
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E R R A T A S H E E T

IN RE: In Re: MDL Docket No. 1535

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